DOCUMENT RESUME

ED 055 316 EA 003 644

TITLE	Temporary Special Levy Study Commission. Volume I: Summary Report and Research Reports. Final Report.
INSTITUTION	Washington State Temporary Special Levy Study Commission.
PUB DATE	Mar 71
NOTE	637p.
EDRS PRICE	MF-$0.65 HC-$23.03
DESCRIPTORS	Administrative Personnel; Assessed Valuation; Basic Skills; *Costs; *Curriculum; Educational Finance; Expenditure Per Student; Gifted; Indians; Migrant Education; Salaries; *School Districts; *School Size; *School Taxes; Special Education; Student Participation; Tax Rates; Teachers

ABSTRACT

This report, volume I of an indepth study of special levy problems in Washington State, represents the results of a study commission examination of finance and curriculum and contact with commission counterparts in the Federal Government, and a review of the work of other States. Included in this volume are (1) a survey of Washington State's program of basic education for common schools; (2) a comparative analysis of Washington school districts' commonality of expenditures, curriculum offerings, and staffing procedures; (3) a school levy survey; (4) the effect of enrollment size on selected aspects of the education process; (5) an analysis of costs for large schools; (6) some impressions gathered from visits to small schools; (7) a description of special education programs in Washington, including those for Indians and migrant children; (8) the status of gifted children programs; and (9) teacher and administrator salary schedules and trends. Volume II of this study is cited under EA 003 645. (JF)

ED055316

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
OFFICE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

EA 003 644

ED055316

Research Reports

Volume I

Including Summary Report

TEMPORARY SPECIAL LEVY

STUDY COMMISSION

THE SEAL OF THE STATE OF WASHINGTON
1889

March, 1971

MEMBERS OF THE TEMPORARY SPECIAL LEVY STUDY COMMISSION

Governor's Appointees:
Raymond W. Haman, Chairman, Mercer Island
John Cook, Mount Vernon
Albert Angelo, Vancouver
Robert Brachtenbach, Selah
William D. Roberts, Spokane
David H. Swenson, Tacoma
Andrew Young, Seattle

Appointees of the President of the Senate:
Senator Charles W. Elicker, Bainbridge Island
Senator Gordon Herr, Seattle
Senator Gary M. Odegaard, Onalaska
Senator Joel M. Pritchard, Seattle

Appointees of the Speaker of the House:
Representative A. A. Adams, Tacoma
Representative Richard Chapin, Bellevue
Representative Robert Randall, Bremerton
Representative Richard L. Smythe, Vancouver

Joint Committee on Education:
Representative Frank B. Brouillet, Puyallup

Legislative Budget Committee:
Representative Gerald L. Saling, Spokane

State Board of Education:
Harold Watkins, Federal Way

Washington State School Directors Association:
James D. Mason, Seattle
Charles R. Guthrie, Wapato

Appointees of the State Superintendent of Public Instruction:
Douglas Suhm, Yakima
Peter Neuschwander, Kirkland
Michael Sells, Edmonds
Peter Lolos, Ephrata
Robert H. Woodroof, Aberdeen
Roger Elder, Tacoma

Superintendent of Public Instruction:
Louis Bruno, Olympia

Liaison Members Appointed by the Legislature:
Representative Mary Ellen McCaffree, Seattle
Representative Max E. Benitz, Prosser
Representative Joe D. Haussler, Omak
Representative Fred A. Veroske, Bellingham
Senator Hubert F. Donohue, Dayton
Senator Elmer C. Huntley, Thornton
Senator Robert C. Ridder, Seattle

Staff:
James E. Friet, Executive Director, Bellevue

CONSULTANTS AND STAFF

Senior Study Team

Dr. James E. Friet, Executive Director, Bellevue
Dr. Paul Ford, Washington State University, Pullman and Western Washington State College, Bellingham
Dr. Richard Starbird, Western Washington State College, Bellingham
Richard D. Widrig, Battelle-Northwest, Richland

Other Contributors

Dr. Carl Bennett, Battelle-Northwest, Richland
Dr. Frank Besag, University of Wisconsin, Madison
Dr. James Best, University of Washington, Seattle
Dr. George Brain, Washington State University, Pullman
Dr. R.J. Brauns, Battelle-Northwest, Richland
Dr. Ray L. Buschbom, Battelle-Northwest, Richland
Bruce K. Chapman, Writer, Seattle
Gary A. Clark, Western Washington State College, Bellingham
James Clark, Seattle Community College, Seattle
R.L. Engel, Battelle-Northwest, Richland
Dale R. Fransson, Western Washington State College, Bellingham
Dr. Donn D. Gilbert, Western Washington State College, Bellingham
James Impara, Florida State Department of Education, Tallahassee
Dr. James W. Johnston, Battelle-Northwest, Richland
Dr. George Kontos, Battelle-Northwest, Richland
Dr. Raymond Latta, Western Washington State College, Bellingham
Dr. Robert W. Legan, Battelle-Northwest, Richland
Dr. R.C. Liikala, Battelle-Northwest, Richland
Ian L. MacDonald, Western Washington State College, Bellingham
Dr. Gordon McCloskey, Washington State University, Pullman
W. Patrick Moyer, Shoreline School District, Seattle
Larry Petry, Western Washington State College, Bellingham
Dr. William A. Reardon, Battelle-Northwest, Richland
William Scott, Ernst and Ernst, Seattle
E.E. Voiland, Battelle-Northwest, Richland
Jane Wharton, Copy Editor, Seattle

Staff

Dr. James E. Friet, Executive Director
Sheryn Hara, Research Associate
Richard Crockett, Political Science Intern
Beverly DuFort, Secretary
Elizabeth O'Boyle, Secretary

The Commission wishes to acknowledge the outstanding spirit of cooperation and assistance exhibited by local school district superintendents, teachers and board members, state agency personnel, and college and university students and staff without whom this report would not be possible.

SUMMARY REPORT
TEMPORARY SPECIAL LEVY
STUDY COMMISSION

THE SEAL OF THE STATE OF WASHINGTON
1889

February, 1971

MEMBERS OF THE TEMPORARY SPECIAL LEVY STUDY COMMISSION

Governor's Appointees:

Raymond W. Haman, Chairman, Mercer Island
John Cook, Mount Vernon
Albert Angelo, Vancouver
Robert Brachtenbach, Selah
William D. Roberts, Spokane
David H. Swenson, Tacoma
Andrew Young, Seattle

Appointees of the President of the Senate:

Senator Charles W. Elicker, Bainbridge Island
Senator Gordon Herr, Seattle
Senator Gary M. Odegaard, Onalaska
Senator Joel M. Pritchard, Seattle

Appointees of the Speaker of the House:

Representative A. A. Adams, Tacoma
Representative Richard Chapin, Bellevue
Representative Robert Randall, Bremerton
Representative Richard L. Smythe, Vancouver

Joint Committee on Education:

Representative Frank B. Brouillet, Puyallup

Legislative Budget Committee:

Representative Gerald L. Saling, Spokane

State Board of Education:

Harold Watkins, Federal Way

Washington State School Directors Association:

James D. Mason, Seattle
Charles R. Guthrie, Wapato

Appointees of the State Superintendent of Public Instruction:

Douglas Suhm, Yakima
Peter Neuschwander, Kirkland
Michael Sells, Edmonds
Peter Lolos, Ephrata
Robert H. Woodroof, Aberdeen
Roger Elder, Tacoma

Superintendent of Public Instruction:

Louis Bruno, Olympia

Liaison Members Appointed by the Legislature:

Representative Mary Ellen McCaffree, Seattle
Representative Max E. Benitz, Prosser
Representative Joe D. Haussler, Omak
Representative Fred A. Veroske, Bellingham
Senator Hubert F. Donohue, Dayton
Senator Elmer C. Huntley, Thornton
Senator Robert C. Ridder, Seattle

Staff:

James E. Friet, Executive Director, Bellevue

The Commission wishes to acknowledge the efforts of those who assisted in the preparation and publication of this report. A complete list of credits will be found in the opening material of the technical report.

CONTENTS

Foreword 5

Chapter 1: A Primer on the Problem 7

Chapter 2: What Is a Basic Education? 15

Chapter 3: Costs and Funding 21

  Section 1: Details of the Local Situation 21

  Section 2: Allocating the Money 24

Chapter 4: Assessment and Accountability 33

Chapter 5: Better Money Management 37

Chapter 6: Looking Forward 41

Chapter 7: The Possibility of Metropolitan Funding 45

Appendix A 49

Appendix B 55

FOREWORD

Finance of common schools is one of the major charges of all state governments and a growing charge of the federal government. Nationally, as in Washington State, periodic reviews of the funding situation are conducted by various bodies, but seldom, if ever before has the subject received such intensive and extensive consideration as it is receiving now. Texas and Michigan recently produced massive reports on school finance and New York State is presently engaged in a study costing one million dollars. At the Federal level, the United States Office of Education has funded a National Education Finance project, and the President himself has appointed a Commission on School Finance.

One reason for so much concern about education financing is the national trend toward higher and higher special school levies and the simultaneous stiffening of taxpayer resistance to them.

The Washington State Special Levy Study Commission was created by the 1969 legislature to conduct a study of the special levy problems in this state. To do so required a deep look into the broad areas of finance and curriculum. We have examined the work of other states and have contacted our counterparts there and in the Federal Government. Extensive public participation in Commission activities was encouraged. We believe that our study, and particularly the simulation study, will contribute to the state-of-the-art in this kind of work.

More important, we believe we have presented the legislature with a sound analysis and sound recommendations for treating some of our common schools' most serious difficulties.

4|5

Chapter 1

A PRIMER ON THE PROBLEM

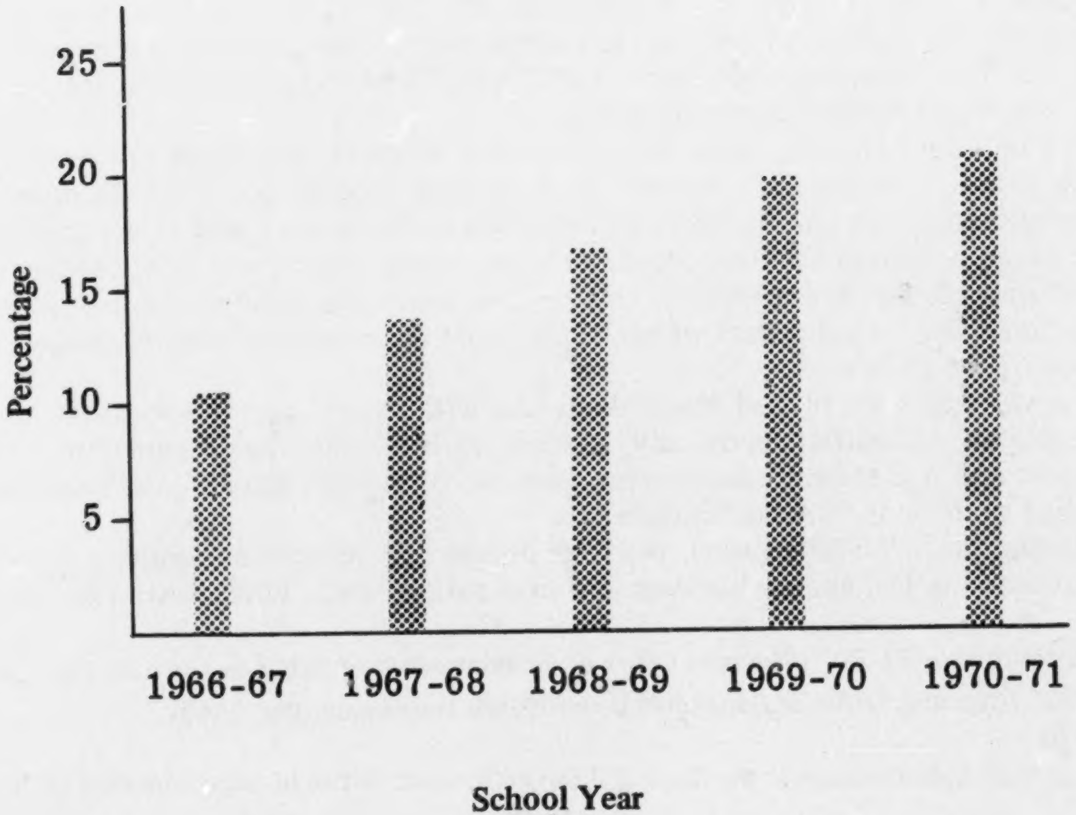
Washington State, judging by the authoritative *Research Reports* of the National Education Association, has one of the nation's finest common school systems. According to the 1969 evaluations, Washington youth have the country's highest passage rate on the Armed Forces Mental Qualification Test. The state ranks first also in the percentage of high school graduates within the total population and has the lowest rate of high school dropouts. The educators, students, public officials, and taxpayers of Washington should be proud of these achievements. We must be doing something right.

However, efficient and equitable funding of the public schools apparently is not it. Despite the primacy of education in the attention of state government, and the labor of dedicated education supporters, the common school system of Washington State is in trouble financially and politically. Costs state-wide are far surpassing the state government's guaranteed expenditure level, and even as the need for special levies increases, voter support seems to grow more precarious.

Simply put, when local school district costs exceed the support level guaranteed by the state, the district must approach the voters with a special levy on property to pay the balance. Most capital costs

Figure 1

PERCENTAGE OF MAINTENANCE AND OPERATION FUNDS MET BY SPECIAL LEVIES



traditionally are met in this fashion, but in the last few years the maintenance and operation of schools also have had to be supplemented by special levies.

Figure 1 shows that as recently as 1966-67 the percent of maintenance and operation funds state-wide which were met through special levies was 11.6 percent. In 1967-68 it rose to 14.1 percent; in 1968-69, to 17.0 percent; and in 1969-70, to 20.1 percent. In 1970-71, the state's common schools will derive (or try to derive) nearly 22 percent of their income from special levies; these are no longer "special," in the sense of unusual. Except for the state appropriation itself, the special levies far surpass in amount the revenue of any other available source of school income.[1] Most districts have come to depend on them. Defeated levies in certain districts, such as Seattle or Bellevue, would mean a one-third or higher cut in school budgets.[2] But even some districts with high property valuations depend on the special levy. Indeed, 85.34 percent of students in the state live in districts that passed special levies last year.

Widespread dependence on the special levy does not, however, attest to any popularity for it among educators, or among voters, for that matter. The special levy is one of the most unreliable and unstable possible sources for school funding. Levies are required to receive approval by 60 percent of the voters, which many observers consider an unrealistically high majority, and at least 40 percent of the voters who voted in the previous regular election must turn out in order for the election to be validated. Even when levies are passed, the affected communities pay a cost in educator and layman energies diverted to the levy from other concerns, and the levy campaigns are often conducted in an atmosphere of such extraneous vagaries that even the weather may affect an election outcome. Few other governmental budgets could survive such a testing.

As it is, increasing numbers of special levies are failing. The Office of the Superintendent of Public Instruction reports that in 1969, "28 school districts asked for special levies and failed. In the current year [1970], 60 school districts have failed levies. Out of the 60, 23 were resubmitted and failed. In these 23 districts, the funds requested amounted to $26,709,446."[3]

The effects of special levy uncertainties are felt most keenly at the local district level, but one of the root reasons for the predicament lies in Olympia. The costs of education have outstripped the state government's ability and/or willingness to fund them under the present system of tax collection and expenditure allocation.

Clearly, the state's responsibility is vast–indeed, primary–in the finance of education. "It is the paramount duty of the state to make ample provision for the education of all children," says the Washington constitution. "The Legislature shall provide a general and uniform system of public schools. . ." (Article IX, sections 1, 2).

Backing in substance for the constitutional pronouncement came in 1895, when John R. Rogers of Puyallup introduced a principle new to Washington and the nation: namely, that it is the state's responsibility, through its taxing power, to guarantee every child a basic education. The resulting legislation, known as the "Barefoot Schoolboy Law," gave Washington the basis for an ultimate push toward common school superiority among the states.

Later, a 1933 bill, developed by State Superintendent Noah D. Showalter and known as the "New Barefoot Schoolboy Law," established a specific level of state support per pupil–in those days, a grand $0.25 per day. Nevertheless, tax revolts were not unknown in that period, and in the previous year, 1932, the voters had imposed a 40 mill limit on property taxes, a limit which still exists today. (A mill is one tenth of one percent of assessed property value.) The limit necessitated what a recent history of Washington education called "a patchwork of taxation. . .that has become a veritable plague to the schools entering the decade of the 1970's."[4]

The "patchwork" has been revised many times and with increasing sophistication, until today it is sufficiently complicated to baffle nearly any layman, and perhaps many educators. Nonetheless, it represents an earnest and not totally unsuccessful attempt to provide "general and uniform" support for common schools and to do so in "ample" fashion.

At present (using the 1968-69 figures), the state provides 56 percent of common school funds, using general taxation revenue (sales, excise, business and occupation, etc.). Local taxes (six mills of property tax, plus two additional mills collected under state auspices–a total of eight mills[5]–and the one percent real estate excise tax) account for 20 percent of school funds. Local special levies accounted for 17 percent in 1968-69, a figure , as we said, that has risen since then. A few districts also obtain revenue from Public Utility District excise taxes. Federal monies amount to roughly seven percent, largely attributable to Federal forest funds paid to some districts in place of property taxes, Federal Impacted Area funds for districts with Federal installations of various kinds, and certain kinds of Federal grants. These percentages are graphically depicted in Figure 2, below.

---

[1] **Figures are from "Bulletin No. 163-'70" (Olympia: Office of Superintendent of Public Instruction, Dec., 1970).**

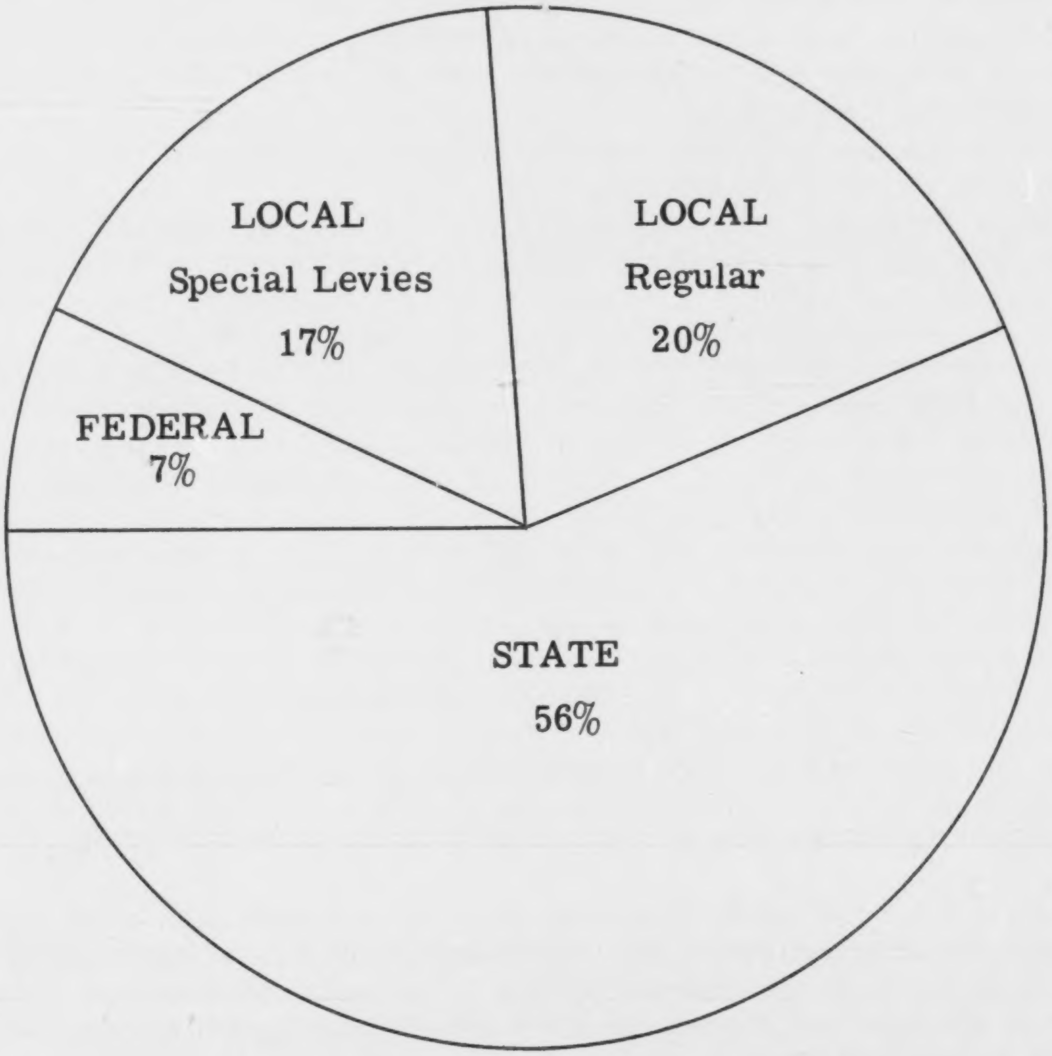
[2] **"Bulletin No. 137-'69" (Olympia: Office of Superintendent of Public Instruction, Dec. 1969).**

[3] **"Bulletin No. 163-'70."**

[4] **Harry Johnson, *et al*, *Washington Schools in the Good Old Days* (Olympia: Office of Superintendent of Public Instruction, 1969).**

Figure 2

SOURCE OF COMMON SCHOOL FUNDS 1968-69 SCHOOL YEAR



---

[5] The allowed local taxation used to be 12 mills, not 6, but it was a paper difference. What happened was that the Supreme Court ordered county assessors, whose custom it has been to assess property at 25 percent of true value, to assess at 50 percent, as specified in the state constitution. That would have meant a doubling of taxes for many people (and more than that for some, since certain assessors were not even assessing property at full 25 percent), so the legislature simply cut the allowable millage roughly in half, to 22. Since the 2 mills of local property tax that had long been collected by the state had been assessed at 50 percent all along, the new limit of 22 mills indeed left the tax load almost exactly where it had been before the Supreme Court decision–except of course that some of those taxpayers whose assessments had actually been below 25 percent in the past are now paying more actual taxes by being charged half the millage, but at the full 50 percent level. On the other hand, some county assessors still are not living up to the Supreme Court standards and assessing at the full 50 percent, thereby somewhat lowering their constituents' property tax bills. The more things change, the more they stay the same. In the 1968-69 school year, total local income from property taxes collected at the state level amounted to $26 million, or 4.5 percent of the total apportionment funding.

Obviously, the state's share is crucial. Olympia dispenses most of the money (43.5 percent of total school funds in the state) to the districts through an apportionment formula, the current version of which was enacted in the 1965 legislative session. Rather than simply apportioning the funds on a strict per-pupil basis, pupils in certain kinds of situations (vocational training, for example) are given additional "weight" in the formula to take account of the extra costs to the districts. The objective is equalization of educational opportunity for all pupils, regardless of the per-pupil wealth of the school districts in which they live. Over all, the formula is supposed to guarantee funds sufficient to pay costs of basic education for all pupils enrolled in all districts.

The apportionment process also is designed to help equalize the financial efforts of the school districts. Once a "guarantee" of a certain sum of money per weighted pupil is agreed upon, and multiplied times the number of weighted pupils, 85 percent of a district's available local revenue with certain minor variations is subtracted; and the balance, if any, is provided the district by the state. Thus, in theory, poorer districts are put on an equal footing with the more prosperous districts. On the other hand, only 85 percent of the district effort is subtracted, on the principle that the districts with special advantages, such as high valuation of local property, should be given some benefit from them. Also, since the state formula assumes in its calculations that district property is taxed at the legally mandated level, the exemption of 15 percent of local revenue from the calculations provides some compensation for districts in which assessment levels are artificially low (school districts have no control over county assessors). These considerations are called the "leeway factor."

It has become increasingly apparent, however, that the apportionment process is not altogether successful in creating equality of educational opportunity.

The Commission conducted studies comparing the financial and curricular situations of small, medium, and large sized school districts. (By small we generally mean under 1,000 students; by medium, 1,000 to 5,000; by large, over 5,000.) These comparisons, or "commonality studies," gave considerable insight into the difficulties that afflict particularly the smaller and larger sized districts.

We found that districts with more than 1,000 students tend to provide a roughly comparable educational program. Even certain smaller districts–the nonhigh school districts–provide an elementary school program generally equivalent to those of larger districts, except that they tend to lack kindergarten programs. On the other hand, at the high school level, the offerings of the small districts are not comparable with those of the larger districts. Fewer courses are available even though the staff spend more time teaching. Typically, each teacher in a small district must teach a relatively wide variety of courses, and with relatively little time available for preparation. The lower student-to-teacher class ratios of the smaller districts can only partially compensate for the drawbacks of such districts.

Financially, the small district staff salaries tend to be the lowest (despite the teachers' workload); yet the low student-to-teacher ratios help drive up costs, which are the highest of all the size categories.

Under the present formula, the small districts' situations tend to qualify them for the most state aid per pupil. In most cases, they also get more local funds because of high assessed property valuation per pupil in rural areas. Therefore, even though their costs per pupil are higher, the small districts are least dependent on special levies. Of 86 districts without special levies in 1968-69, 66 had fewer than 1,000 students.

The large districts, on the other hand, also have unusual difficulties–ones with more severe consequences in terms of tax burden per taxpayer. At a certain level, the economies that go with increased size seem to reverse and costs go up thereafter. Salaries for all staff tend to be high. Additionally, large districts tend to have relatively low property valuation per pupil, particularly communities, such as many suburbs, which lack an industrial base.

The present state distribution of funds has the effect of according the largest districts the lowest levels of aid per pupil. This, combined with high costs and low valuation, leads directly to very high special levies.

Not surprisingly, the situations of most medium sized districts tend to fall between the extremes of the larger and smaller units; they have low costs, average valuation, and average state aid.

Financially, then, it is clear that the present state aid formula does not adequately account for the fact that taxpayers in some districts are paying substantially more for children's education than are those in others. The result in such districts: higher and higher special levies.

However, before the question of changing the state apportionment formula can be discussed, it is essential that one examine the question of school program content. Obviously, one reason costs may be higher in some districts than in others is the availability of more courses in the curriculum. Through the

"Barefoot Schoolboy Law" of 1895, and its successors, the legislature is bound only to support a "basic education" for all students; but what exactly is a "basic education"? The Commission was asked to find out.

Once upon a time, the state attempted to standardize the content of what it considered a basic education in the various districts. Curriculum was determined at the state level, as were texts. Examinations to insure quality of common school education were devised in Olympia and administered to students by county superintendents. Since the early 1930's, however, emphasis has been placed on local determination of curriculum and teaching methods. In addition, the uniform state examination system has been abandoned, and now testing programs are developed and implemented by the districts themselves.

Through experience and general preference, current state basic education programs are only broadly outlined at the state level and interpreted in detail by the localities. The state guidelines do, however, rest on certain explicit laws and regulations. These relate to some specific content areas in which all students must enroll, amounts of time students must spend in school, staff qualifications, ratios of students to staff, instructional resources, and transportation and administration. The regulation does tend to be more extensive for the secondary schools (grades 7-12) than for the elementary schools.

To update the state concept of basic education and thereby provide improved criteria for fund allocation was one of the main charges given the Temporary Special Levy Commission (see Chapter 2).

A concomittant charge was to develop better ways of discovering how well the common schools are actually functioning. This meant talking to voters and community leaders and to those businessmen who have an opportunity to examine the graduating products of the schools. It also meant developing a program of "assessment and accountability" to evaluate school strengths and weaknesses.

A commission survey was made of voters in districts where special levies had failed. (See "Levy Failure Study" in the technical report.) Not surprisingly, within the sample, support for the levies largely came from those who felt they could afford to pay for increased costs in education—professional and managerial people, those with comparatively high incomes, those with at least some college training, and those with school-age children. Also, the younger the respondent to the survey, the more likely that he supported the levies. Opposition came from those over 50, those on fixed or low incomes, and those with little formal education.

Also not surprising was the predominance of purely economic reasons given by those who opposed the levies. Some observed that the levies afford people an unusual opportunity to vote "no" on government spending in general. Many bemoaned the reliance on the property tax.

The second most common reason for opposition to the levies was related to school administration policies: dissatisfaction with what was perceived to be the spending policies of the local district, and with the official explanations, or lack of them, for why the money was needed. One voter said "One must provide funds to educate the children, but we did *not* need a new stadium and tartan turf!" Another "no" voter responded to a question on how the school situation could be improved: ". . .A school board that listens to parents' questions, and answers honestly." When asked why she had voted no on the levy, a lady replied, "[Because of] sparse information given to the voters. . .[and lack of] honesty in presenting the information asked."

Many levy opponents appear to suspect that economies in personnel and extracurricular activities could be made in local school systems. To illuminate these possibilities, they would like to see the communication between the district administrators and the voters improve on the subject of spending priorities. Some survey respondents suggested breaking down levy proposals into component parts and explaining the necessity for each; thus possibly allowing the voter to choose which parts of the package he wants to support.

An even more extensive survey (also detailed in the technical report) was made of the opinions of some 1,150 local leaders in many fields on the subject of Washington's educational needs. In May 1970, the Commission held 20 all-day conferences of local leaders in various parts of the state: Seattle, Bellingham, Longview, Omak, Vancouver, Everett, Edmonds, Kent, Spokane, Wenatchee, Bellevue, Aberdeen, Tacoma, Olympia, Port Angeles, Walla Walla, Pasco, Yakima, Moses Lake, and Cheney. In all, some 149 communities were represented among the participants. Also represented were wide ranges of occupations and ages. Major topics were early childhood education, elementary and middle school education, high school education, vocational-technical education, special services for pupils with special needs, learning materials, and administrative services.

Among the surprising findings of these conferences were the similarities in viewpoints expressed, whether the participant was an educational leader or some other kind of community spokesman, whether he was from the east side or west side of the state, whether he was from a small, medium sized, or large community. Even more remarkable was the overwhelming (90 percent) support for more emphasis on most of the educational elements listed on the opinionnaires filled out by participants. Clearly, the leadership sector of the state's localities want expanded services from the school system, from child training information for parents, to more parent-teacher conferences, to training in community planning, to more individualized assignments, to better career development. Present school emphasis was found acceptable in some areas, and less emphasis was desired in a few areas, but the conferences and the opinionnaire surveys were strongly characterized by a belief that the schools should be carrying greater, not less, responsibility in society.

Yet another Commission study (also detailed in the technical report) requested the opinions of major Washington State employers and their personnel departments on the quality of recent public school graduates. Naturally, many employers may consider as ideally educated the student specifically trained for one of their employment positions, and one perhaps should keep this possible bias in mind when considering their views. Nonetheless, the world of work does, in a sense, represent the reality in which people must live, and the view of employers can be an important source of information on the school system's success.

Structured interviews were conducted with 35 of the 41 major Washington firms invited to participate in the study. Their activities covered manufacturing, sales, service and occasionally combinations of these. (As an interesting aside, the fact that anyone close to government should be interested in their views on the schools' graduates stirred substantial enthusiasm among a number of the participants.)

The preponderance of managers (15) felt that the general caliber of recent graduates has improved over the past five years, while many (13) indicated "no change," and two considered the new graduates less effective. In particular, communication skills among the young – reading, writing, and speaking – received quite favorable marks from the managers.

However, the recent high school graduates scored rather low in the estimation of major employers as regards work attitudes. Whether an eagerness to work can be inculcated in a student through a school process is a difficult question, as is the question of how much intrinsic interest, beyond a paycheck, can be found in many jobs. In any case, the cited decline in positive work attitudes surely merits closer examination.

Twenty-six managers felt, furthermore, that public schools often fail to develop young people's potential for reaching specific job skills. This, of course, reopens the long-standing debate about the relative desirability of general education versus job preparation, and should be viewed in that context. (See Chapter 2.)

However, the managers probably were in close accord with many other observers when 23 of them denounced what they viewed as a nearly exclusive concern with college preparation on the part of the public schools. The managers strongly urged that vocational-technical counselors be as available to students as are counselors for the college bound. Some respondents ventured that their own employees and facilities might be loaned to the common schools to help orient students to opportunities in business and industry.

Such are the views of the education system by various outsiders, but even more consequential is the understanding of education's work by educators and legislators. Unless those directly responsible for the common schools are able to evaluate the schools' performance, they cannot know adequately how to plan, how to prune the unnecessary programs and fertilize the promising; and they certainly cannot do a suitable job of persuading the citizenry to provide the necessary support for funding.

The blunt truth is that there presently is no logical, systematic method employed by any state agency to assess the total impact of the common school program on its clients. Such assessment procedures as do exist on the local district level vary widely in approach and quality. The net result is that those principally responsible for conducting the state's common school program, or for funding it, cannot evaluate its components.

For example, the 1969-71 biennial budget to support with state funds the excess costs of the common schools' handicapped programs was approximately $43 million, yet there is no way to assess the effect on learners of the dollars expended. The program is not "accountable." Indeed, because of the simplistic "object and function" budgeting system used in allocation of funds, it is not possible to determine, except in general, where the dollars really go.

This, then is the scope of the problem the Commission has attacked in its studies, hearings, and lengthy deliberations. Under the instruction of the legislature, the hard-core questions to which we have sought answers are:

1. What is a basic education program to which every child is entitled and for which the state should provide its guarantee?
2. What resources of money, manpower, facilities, and equipment are required for local school systems to meet educational demands?
3. What are the fiscal programs that will best enable the state and the constituent local school districts to meet basic educational costs?
4. What are the best means by which educational systems can be held accountable to the public for educational quality in the public schools?
5. What indices provide the best means of continuous evaluation of the performance of the state's educational system?

In our view, the primary objective of the common schools is a citizenry that is literate, ethically responsible, physically sound, and self-supporting. Of course, much of the chance for meeting this objective is determined by the home life of students and by the stimulation of the individual teacher. Nonetheless, the extent of the state's support is also very important. We hold that every individual in the state should be offered the opportunity of completing a state-supported curriculum, from grade K-12, or the equivalent. Furthermore, regardless of a student's social, economic, or geographic circumstances, this program should be of sufficient breadth and depth as to prepare him for admission to an institution of higher learning or for entry-level employment and/or career training.

These must be considered far-reaching goals; there must be far-reaching efforts to meet them.

Chapter 2

WHAT IS A BASIC EDUCATION?

The First Extraordinary Session of the Legislature, in 1969, again stressed the legislative intent to provide equal educational opportunities to all of the state's common school youth. This charge was construed by the Temporary Special Levy Study Commission as extending beyond the simple specification of course offerings. It was assumed that education involves complex relationships among students, teachers, and communities. Consequently, our findings and recommendations cover a spectrum of concerns that is wide, but nonetheless "basic."

We were influenced in our deliberations by the state-wide conferences of community leaders mentioned in the previous chapter. Also, in September of 1970 every school board chairman, district and intermediate district superintendent, Parent Teacher Association Council president, Washington Education Association president and Washington State Federation of Teachers president in the state was asked to rank a list of criteria pertinent to basic education. In addition, scores of interviews were conducted with government officials, businessmen, social-cultural agencies, students, and educational authorities at all levels. Other states' analyses were studied, as was the work of prominent curriculum authorities nationally. Finally, a detailed analysis of the entire common school program, district by district, was performed for the Commission by the Battelle-Northwest research organization.

The bulk of the summary findings of the Battelle study will be found in Chapter 3, but as regards curriculum, several data are pertinent here.

We found little difference, for example, in the reported elementary curriculum in various sizes of school districts throughout the state. This probably can be attributed to the limited number of courses possible at that level. Interestingly, team teaching was reported in use in only four percent of the elementary schools. All others reported use of the self-contained classroom. The major variation in programming in the elementary schools was the assignment of teachers to special subject areas such as advanced or remedial mathematics or reading. Fewer of these courses were found in districts with fewer than 1,600 students.

Of greater consequence, 140 districts in the state did not offer kindergarten. Most of these were districts with fewer than 1,000 pupils, though one large district, Spokane, accounted for approximately 50 percent of the total number of children not included in kindergarten programs.

At the secondary level, major differences in both the number of subjects offered and the percentage of enrollment in those subjects was reported among the various districts. There was a definite decline in curriculum diversity as school district size decreased.

Junior high school students were enrolled in 6.4 subjects on the average. But the number of junior high school (grades 7-9) subjects offered ranged from as few as 10 to as many as 135, according to district size. In the upper limits, it should be noted, the large number of diverse courses offered were not necessarily all at any one school; still, the differences are striking. State-wide the number of courses most frequently given was 25, while in schools with over 1,600 students an offering of 35 subjects was most frequently reported.

Within the junior high school curriculum, students were selecting courseloads, on an average, which were 60 percent academic, 34 percent personal development (including physical education) and 6 percent vocational-education.

Among high schools of the state, the disparity in the diversity of course offerings was even more pronounced. Senior high school students took, on an average, 5.0 subjects each, but the number of senior high school (grades 10-12) subjects reported by districts varied from 13 to 200. Districts with more than 1,600 students tended to offer about 55 subjects, while small districts tended to offer only 35 courses.

The student-chosen curricula in high schools state-wide were 60 percent academic, but only 25 percent personal development, and a compensating increase in vocational-education to 15 percent.

The Commission discovered, moreover, that the number of courses and general subject areas offered in the middle-sized and larger districts of Washington has been increasing every year, yet it does not appear that subject matter previously taught is dropped to make room for the new. The process is one of gradual, constant accretion.

There may be several reasons for this ongoing expansion, but for the most part, the schools simply are responding to both the well-founded and ill-founded demands of society for added realms of knowledge. Subjects of newly fashionable emphasis are added *ad infinitum*, and perhaps all of these courses are worthwhile, but the value of setting priorities–deciding what is of *most* worth apparently is fading in accepted importance.

At some point–whether we have reached it is a question–the satisfactory transmittal of fundamentally important knowledge and skills may be sacrificed to the study of more modish, but less worthy material. However, of greater immediate concern to this Commission are the high costs which may be incurred because of course proliferation and specialization, especially when they are accompanied by reduction in class sizes.

The increased costs are made evident in two ways. First, additional staff must be recruited, or presently employed staff must be retrained, so that specialized courses may be offered. Second, if previously taught subject matter is not removed to make room for the new, over-all costs go up.

However, though it can be overdone, a certain amount of diversity in course offerings is valuable in stimulating different kinds of students. While the larger schools may have trouble setting priorities, the smaller schools do not even come close to equivalence in either the variety or depth of course work available in the larger schools. This is not, of course, to generalize about the quality of teaching in either size of school.

In any case, the content of curriculum does not alone comprise the description of a basic education in the minds of the Commission or of the many other Washingtonians we have interviewed. Before giving our own recommendations, here is a consensus on a revised definition of basic education found among educators and community leaders in the state:

1. There is agreement that the state should continue to set broad policy for the common school program, and that specific policies, as well as implementation, should be the responsibility of local districts.
2. Every child in the state, it is felt, should be furnished the opportunity to attend kindergarten.
3. There is no consensus on the value of providing compensatory educational programs for urban and rural racial minority groups. The prevailing rural sentiment is definitely opposed.
4. Increased attention should be provided for the handicapped and the gifted.
5. Increased counseling, particularly vocational counseling, should be provided.
6. More attention should be given to vocational-technical training.
7. Community resources should be used to enhance the school curriculum.
8. Citizens strongly back more individualized instruction.
9. Free transportation should be made available for any student who lives more than two miles from his school.
10. The state should supply free textbooks and required instructional materials for all students.
11. Most of the people questioned by the Commission believed that the community and the students, as well as the teachers and administrators, should be included in development of school district policies.

Commission Recommendations

Given the above background, the Commission has tried to outline the components of the basic education which Washington State should support in its school districts. In our view, a basic education concerns curriculum and instruction, attention for special groups of students, student services that are vital to the utility of the over-all program, instructional materials, and staffing.

1. **The state should support a K-12 curriculum which is broadly specified at the state level and defined in detail at the local level.**

   Every school district should be responsible to the state for conducting a K-12 basic education which offers every student 13 years or their equivalent of systematic and sequential instruction in the language arts, social sciences, sciences, and mathematics. Skills in these areas are generally requisite for individuals to become literate and self-supporting. Vocational-technical education should be provided for at least grades 7-12, since skills in this area are crucial for certain individuals to become self-supporting. Recognizing the causal relationship between the early development of motor skills and skills involved in reading, writing, and computation, we believe that

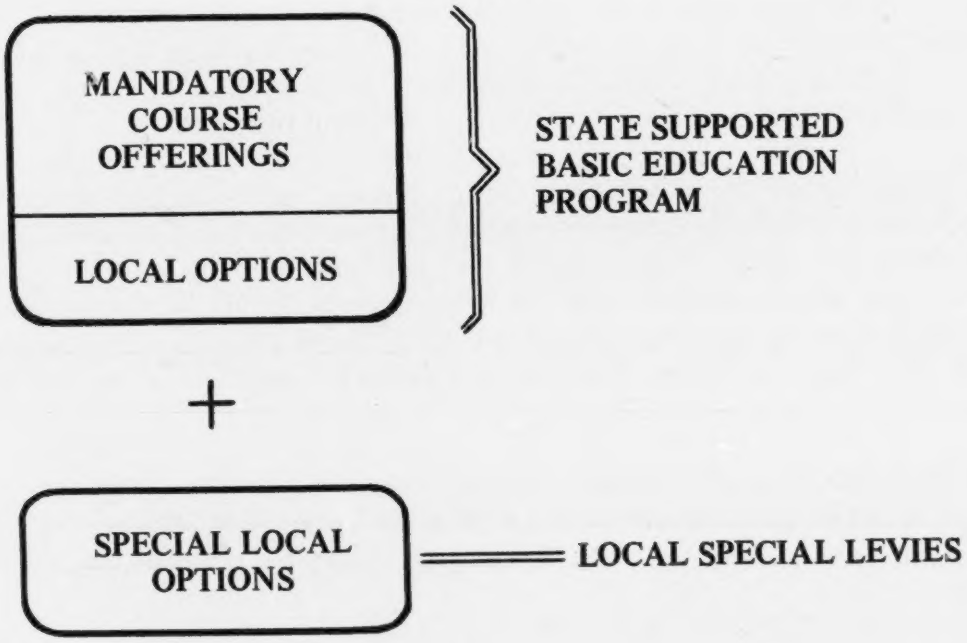
physical education should be required in at least K-9, and because of the crucial importance of physical well-being to long-term achievement, physical education should be encouraged in later years as well. Further, at a time when young people must become responsible for their own physical well-being, we recommend that at least one course in health education be required. Instruction in the several arts should be available to students in both elementary and secondary school.

Of course, we recognize that the specific content of the subject matter and the curricular sequences of the basic education which we urge should be determined at the local level, as should teaching methodology and staffing patterns. Moreover, while we refer to "years" and "grade levels," this language should be construed only as a guide since school districts may wish to employ a continuous progress program which has only an indirect relationship to "years" and "grade levels."

Above and beyond the minimal requirements we have proposed, each district should be responsible for defining what constitutes a basic education for that district. Thus, a district might wish to offer instruction in areas that are important to it in addition to those that are considered mandatory by the Commission. However, since financial resources are not sufficient to support all of the instructional areas and activities which local districts might offer, each district must establish priorities as to those for which they will use state support. Some districts will want to offer programs and activities in addition to those that receive full state support, but in such cases they will have to call upon their own resources to finance them. (See Figure 3, below.)

Figure 3

EDUCATION PROGRAM ELEMENTS


MANDATORY COURSE OFFERINGS
LOCAL OPTIONS
STATE SUPPORTED BASIC EDUCATION PROGRAM
+
SPECIAL LOCAL OPTIONS
LOCAL SPECIAL LEVIES

In any case, local districts should develop their own performance-based objectives for their students, covering all subjects. These objectives should supplement the state assessment program (see Chapter 4), and the results should be made available to local citizens as well as to state officials.

State support for the fundamental approach to curriculum outlined here may be based on a per-pupil guarantee, a ratio of students to certified personnel, or any other reasonable plan, but the integrity of the approach should be maintained.

2. **We recommend that kindergarten be included in the state-supported program and offered in all districts except where the Superintendent of Public Instruction decides it would work an extreme transportation hardship upon the students.**

We know that transportation distance and times may be so great in some areas that the benefits of a kindergarten program might be nullified; consequently, an exemption is recommended for hardship situations. However, research shows that sound early childhood programs can minimize the need for remedial training later on; thus in most cases, kindergarten should be required.

The cost of the expanded kindergarten program is estimated at $2.5 million, not including transportation.

3. **Instructional programs should be individualized to improve learning and to assist students in developing a strong and positive self-concept.**

4. **Use of community resources should be encouraged to enhance the curricula offered within the schools. These resources should include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.**

5. **A student voice in planning instructional programs should be encouraged if the curriculum is to be pertinent to student concerns, and if students are to gain a sense of responsibility for their own learning and social behavior.**

6. **Exemplary research and development programs in the local districts should be backed by the state through a funding of 0.5 percent of the total general fund support for K-12 programs.**

Funding in the first year or two would be at the 0.1 percent level and gradually increased to 0.5; or, under the current budget, $1.5 million. No money for this sort of activity is available today, yet only through applied research can we hope to achieve long-term solutions to most of our educational problems.

Needless to say, the state would have to establish a procedure for determining what local research and development projects were approved. Priorities would have to be set and an effort made to assure that local projects were not duplicating the work of other state or Federal projects.

7. **All practical steps should be taken to provide enlarged and enriched program for disadvantaged youth. The appropriate weighting factor in the state's formula should be increased from 0.1 times 25 percent of the disadvantaged students to 0.2 times 100 percent of the disadvantaged students. These funds should be set aside by the state to be awarded on an approved program basis to those districts making a distinct effort in this area. Current Urban Racial Disadvantaged funds would be included in this program.**

In 1968-69, only $837,000 was distributed to school districts by the disadvantaged factor of the apportionment category; most of that amount went to the large districts. Seattle received 29 percent. The eightfold increase recommended would bring the total distributed by the formula in this category to $6.7 million.

8. **Programs for the gifted should be expanded throughout the state.**

The gifted are a resource of immense significance to the prosperity and social and cultural vitality of the state. It is as important for these young people to develop to their fullest potential as it is for disadvantaged youth to realize theirs, yet the present program for the gifted in the state shows only a nodding awareness of the opportunity available. The appropriation for the gifted in the current biennium is $461,370, based on $5 for every 20th child, or only one twentieth of one percent of the standard entitlement in the K-12 program. In 1969-70 there was only one program receiving more than $10,000, and most received less than $1,000. We recommend funding of the gifted program at $2 million a year, so long as this funding is not subtracted from general funds apportioned to the districts.

New projects should be constructed locally for approval by the state.

9. **Programs for the handicapped should be continued, though, as has been indicated, with closer evaluation.**

There are 12 different handicapped conditions recognized and aided by the state, yet no information is available as to how funds are used in the respective programs, each of which has different costs associated with it.

10. **Vocational education should be emphasized in the common schools.**

The question of exact weighting in the apportionment formula is discussed later (Chapter 3), but in any case, the Office of the Superintendent of Public Instruction should consider at least two criteria in granting vocational weighting: 1) the *actual cost* of the proposed vocational program; and 2) the district's willingness to work cooperatively with other schools, agencies, and businesses to sponsor joint programs. The object of the second criterion is to discourage wasteful duplication of facilities.

11. **Transportation costs for all students should be supported by the state at 100 percent, rather than at 90 percent, as such service is vital to providing a basic education to many. Moreover, new criteria should be established for deciding what actual amount of the transportation costs will be covered by the state.**

In 1968-69 the present unrealistically low criteria resulted in average payments of only 73 percent of districts' transportation costs, rather than 90 percent. The principal reason for the difference between the approval level and the actual level is the low salary basis for approval (which essentially means approval of bus drivers' salaries). In 1968-69 the basis was $3.39 per hour versus an average actual salary of $3.96 per hour in the state.

The payment of all transportation costs in 1968-69 would have cost the state an additional $8.28 million. Small districts would have benefited more than larger districts.

12. **Certificated counselors are needed in each district, at least one for every 300 elementary school children and one for every 400 secondary school students.**

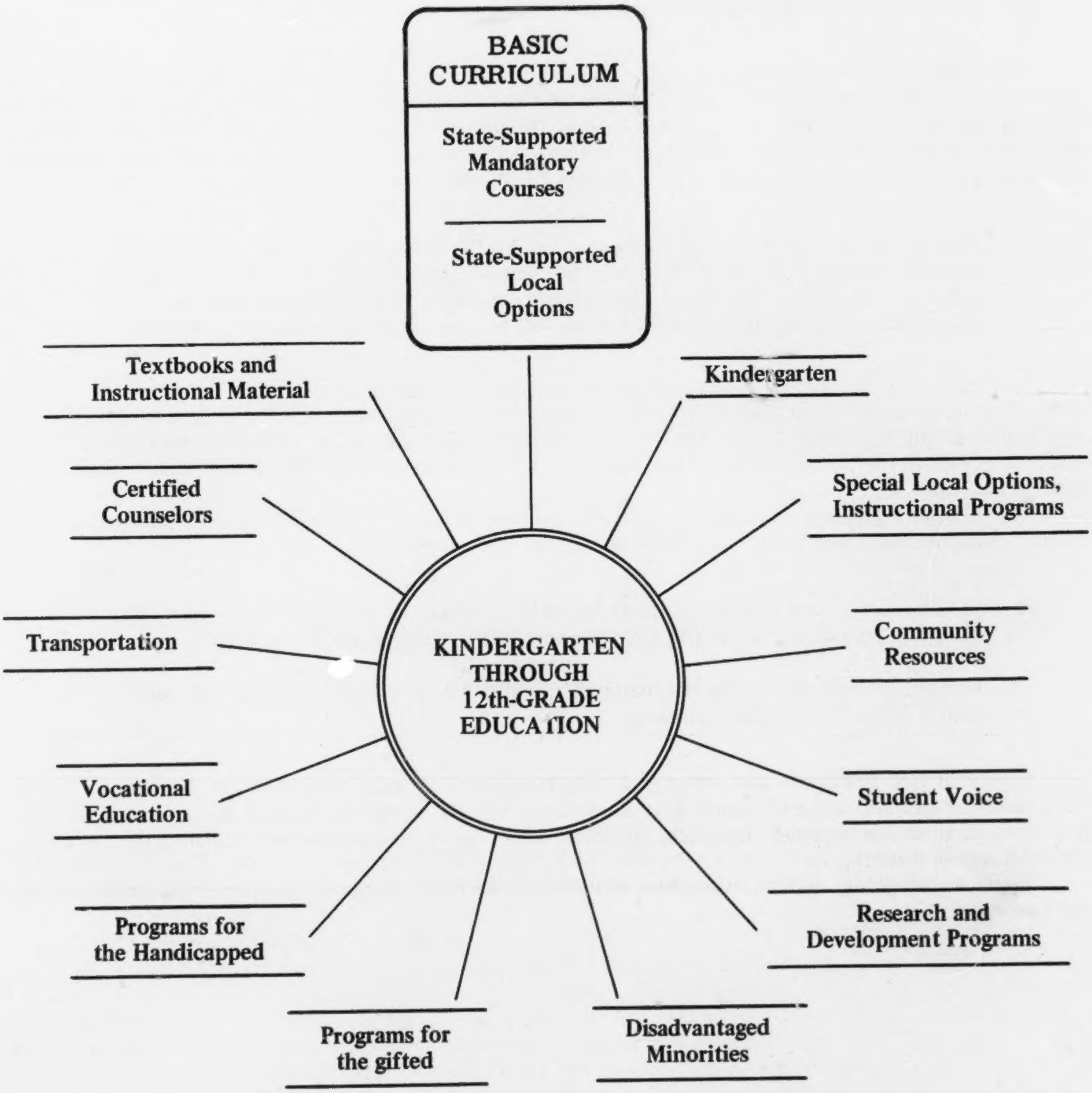
13. **Textbooks and instructional materials should be provided free for all public school students in required courses.**

Supply of free textbooks and other materials is practiced in some local districts, but not in others. This recommendation seeks to assure that no student will be penalized because he cannot afford the instructional tools for required classwork. However, selection of textbooks would remain a prerogative of the local school districts.

Figure 4, following, depicts the various elements of the basic education program as recommended by the Commission.

Figure 4

COMMON SCHOOL EDUCATION


BASIC CURRICULUM
State-Supported Mandatory Courses
State-Supported Local Options
KINDERGARTEN THROUGH 12th-GRADE EDUCATION
Textbooks and Instructional Material
Kindergarten
Certified Counselors
Special Local Options, Instructional Programs
Transportation
Community Resources
Vocational Education
Student Voice
Programs for the Handicapped
Research and Development Programs
Programs for the gifted
Disadvantaged Minorities

Chapter 3

COSTS AND FUNDING

Section 1: Details of the Local Situation

This section expands upon some of the statistical data mentioned in general in Chapter One. A still much more extensive analysis is found in the commonality studies in the technical reports.

School District Composition

The State of Washington is characterized by many small districts with few students and a few large districts with many students. There were 326 districts in the 1968-69 school year. Fewer than 5 percent of these (15) had more than 10,000 students, yet they contained 47 percent of the total students enrolled in the state.

On the other hand, 45 percent of the districts (148) had fewer than 500 students enrolled, and 25 percent had fewer than 200 students. However, these districts had among them only 4 percent of the state's students. In fact, there were 4 urban districts each of which was larger than the combined enrollment of the generally rural 148. A breakdown of school district size characteristics is shown in the following table and Figure 5.

1968-69 SCHOOL DISTRICTS BY SIZE

Enrollment	No. of Districts	No. without High School	Total Enrollment
20,000 or more	6	0	233,508
10,000-19,999	9	0	122,809
5,000- 9,999	20	0	138,658
2,600- 4,999	30	1	104,313
1,600- 2,599	25	0	53,274
1,000- 1,599	28	1	35,019
500- 999	60	2	43,071
200- 499	65	15	21,316
Less than 200	83	58	6,809
Total	326	77	758,777

It should be noted here that the above enrollment figures are for "average annual enrollment." The term should be distinguished from the "weighted student" term used in calculating the state's apportionment formula (see Chapter 1) which is strictly a device for adding to the cost of a student the extra costs of such factors as handicaps, vocational training, etc.

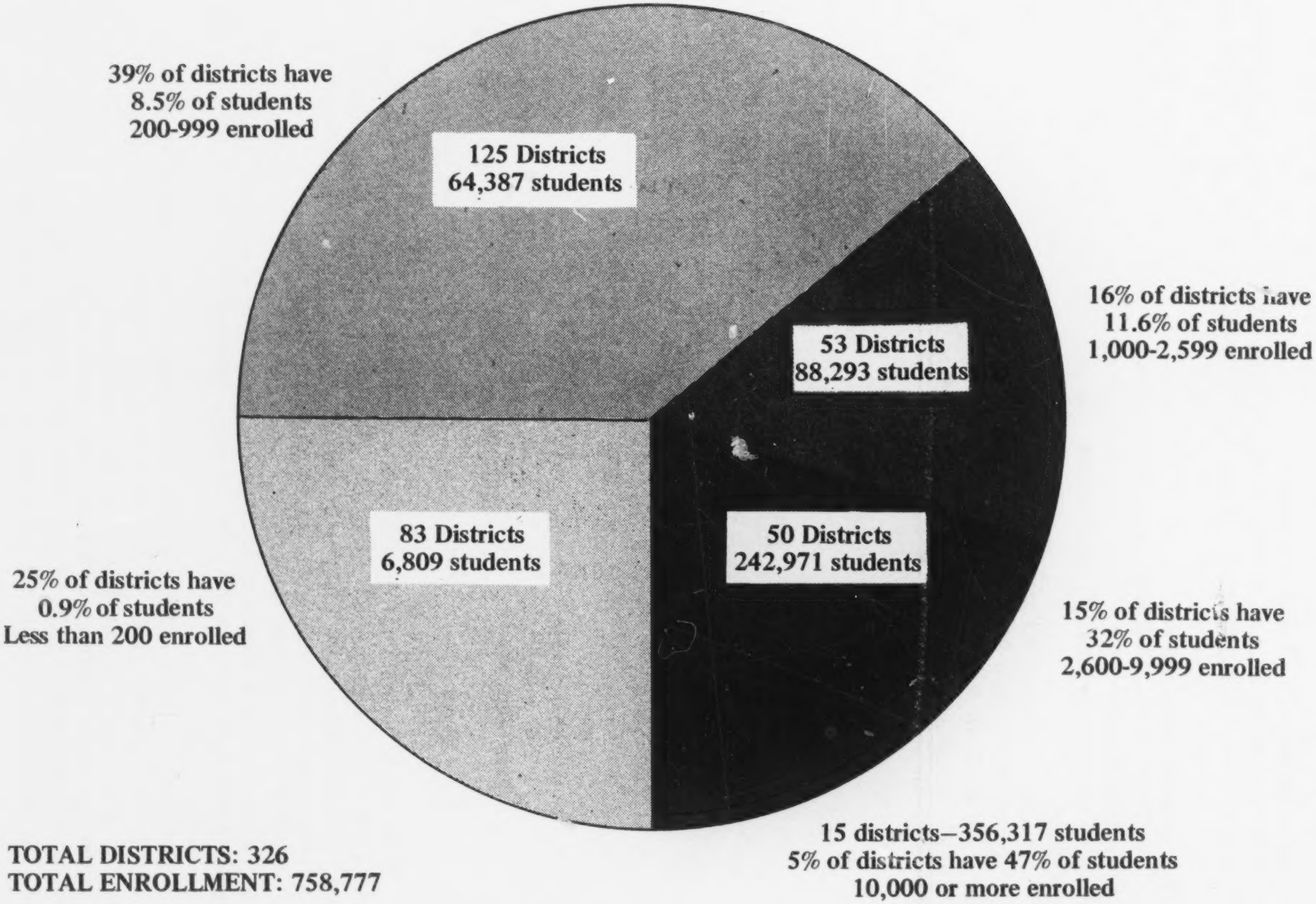
Many of the smaller districts provide an elementary school program only, and send their students to high schools in nearby districts. There were 77 such nonhigh school districts in 1968-69, and all but 4 enrolled fewer than 500 students each. In fact, 70 percent of the districts having fewer than 200 students had no high school.

Significantly, a wide variation exists among districts as to assessed valuation per pupil. Valuation of course, is the basis for much of the local funding support, including special levies, to the schools. The variation in our study of valuations per pupil ranged enormously, from a low of $25 per pupil to a high of $169,000 per pupil. Districts with more than 10,000 students had assessed valuations per pupil roughly comparable with those of the intermediate sized districts; a few exceptions had higher valuations. Even given the exceptions, the highest valuations in the state were found in districts with fewer than 1,000 students.

However, while the highest valuation levels are found in the small districts, the lowest levels are also found in that category. So pronounced among the small districts, the degree of variation in valuation per pupil tends to diminish as districts increase in size.

Figure 5

SCHOOL DISTRICTS BY SIZE–1968-69



Funding Pattern

In terms of funding, the amounts granted per pupil by the state tend to increase with decreasing school district size. In our study, those districts with more than 20,000 students averaged only $410 per student; at the other extreme, those with fewer than 200 students averaged $498 per student.

As noted earlier, it is partly as a result of this situation that the districts larger than 10,000 students require substantially higher special levies than do smaller districts. In the over-10,000 group, the levies in 1968-69 averaged $150 per student, compared with less than $50 per student in districts with enrollments between 500 and 5,000. Special levies in districts smaller than 500 students averaged more than this, but still only $90. On a millage basis, special levies in districts larger than 10,000 students average two to three times those of the under-500 category.

All in all, local funds carry more of the school costs in both the very large and very small districts. In districts over 20,000, local funds amounted to an average of $135 per student; in districts under 200, they were $232 per student. In the middle sized districts–2,600 to 5,000–the local fund contribution was $92 per student.

School Costs

Total costs per pupil (*i.e.*, including all funds) are generally higher in districts with more than 10,000 students than in districts having between 500 and 10,000. Districts smaller than 500 tend to have the highest costs of all.

The average per-pupil expenditure in the state (1968-69) was $662. Eighty percent of the school districts larger than 1,000 students spent between $560 and $1,080 per pupil, and 50 percent spent between $600 and $800 per pupil. All 25 high school districts smaller than 200 students spent more than $770 per student, and 10 spent $1,000 per student.

Just as variation in valuation was generally greatest among the small districts, so the small nonhigh school districts exhibit the most variability in expenditure levels. Fifteen districts in this category spend less than $550 per pupil and 41 districts spend more than $700 per pupil. The connection with valuation levels becomes obvious when one notes that the 21 nonhigh school districts spending more than $1,060 per student have an average assessed valuation 8 times the state average, while the 15 nonhigh school districts spending less than $550 per student typically have a very low valuation; only one such district is substantially above average valuation.

The primary reasons for the high costs of the small districts (low pupil-teacher ratios) and of the large districts (high salaries) were cited earlier. The salaries of teachers and other certificated staff (administrators, librarians, counselors, etc.) tend to increase with increasing school district size, a relatively constant characteristic over the past four years.

Another major cost for the small districts is transportation; the costs of principals, libraries, counseling, and extracurricular activities are other major secondary cost factors in the large districts. Maintenance and operating costs per pupil were higher in both large and small districts than in the intermediate districts.

Salaries, particularly teachers' salaries, are the biggest cost factor in all schools, regardless of size. School districts in the Puget Sound area tend to have higher over-all salaries than in other parts of the state. State-wide, salaries for all certificated personnel have increased 28.7 percent in the past 4 years, a growth reasonably consistent with that of other professions. Certificated staff salaries in Washington compare favorably, but are not out of line with those of other states, including those in the West.

Staffing Patterns

School districts with more than 1,600 students, we found, tend to have similar staffing patterns. Major differences begin to appear in high school districts smaller than 1,600 and are quite apparent in both high school and nonhigh school districts smaller than 1,000 students.

State-wide the average number of students per teacher and students per certificated staff (teachers and administrators together) is 24.8 and 19.5 respectively. There are an average of 14.2 students per total staff (certificated and noncertificated–the latter being secretaries, maintenance men, etc.). These ratios have dropped less than one half student each in the past four years. In our study, the districts with more than 1,600 students tended to follow these averages quite closely.

Our study also found 91 districts, all smaller than 1,000 students, with fewer than 20 students per teacher. In high school districts with fewer than 200 students there were only 14.4 students per teacher on the average. Yet nonhigh school districts of this size averaged 20.6 students per teacher.

Only one district larger than 1,000 students (South Kitsap) had more than 30 students per teacher in 1968-69. This district lost its special levy for that year.

The major inconsistency in the staffing pattern of districts above 1,600 students occurred in the ratio of teachers to other certificated staff. In districts larger than 10,000 students this ratio tended to be lower in elementary schools than in secondary schools. That is, there was a proportionately greater usage of nonteaching certificated staff in elementary schools than in secondary schools. The reverse was true in smaller districts.

Among the school staffs state-wide, teachers represented 58.4 percent of the total. This percentage dropped off in small districts, and there were 63 such districts where teachers accounted for less than 50 percent of the total staff.

The use of part-time certificated staff and teacher's aides increased substantially in small districts. In high school districts with fewer than 200 students, they represent 12.6 percent of the staff, and in nonhigh school districts of the same size they represent 7.8 percent—still substantially above the state average of 4.7 percent.

A higher percentage of classified employees (noncertificated) were used by small districts, primarily, it seems, for transportation services.

Teacher Utilization

It was clear from our analysis that teachers in smaller schools tend to have a greater teaching burden than teachers in larger districts, despite their typically lower pay and, in the case of elementary school teachers, equal experience. In our findings, the average number of classroom contact hours a teacher had with students varied from 889 hours a year in districts larger than 20,000 students to 1,089 hours in districts smaller than 200 students (900 hours represent 5 one-hour periods per day per year). The state average was 943 contact hours per year.

There are indications that principals and other certificated nonteacher staff in small districts perform as teachers on a part-time basis in order to relieve the burden on full-time teachers.

Not only do small district teachers spend more time in class than do large district teachers, the secondary teachers in small districts teach a greater variety of courses each day. State-wide, junior high school teachers in our survey taught 3.0 different subjects and senior high teachers taught 3.3 different subjects. By comparison, secondary teachers in school districts with fewer than 200 students taught 4.8 and 5.9 different subjects in the respective grade groups.

Teacher Experience

The average experience and education level of teachers tends to decrease with decreasing size of districts. This corresponds with an increased turnover rate in the smaller districts.

The experience and education level of elementary teachers varies less in different size districts than does that of other teachers. The average level in the largest districts is virtually the same as that in districts with fewer than 200 students.

In fact, in districts smaller than 1,600 students, elementary teachers tend to have a higher experience and preparation level than do either junior high or senior high school teachers. On the average state-wide, all sized districts, the junior high teachers have a lower experience and education level than elementary teachers, while senior high teachers rank higher in this category than either elementary or junior high teachers.

Teacher turnover per year is higher in the smaller districts, averaging nearly 45 percent in districts with fewer than 200 students, and only 15 percent in districts with enrollments surpassing 1,600. The turnover rate has been nearly constant for all sizes of districts during the past four years.

Section 2: Allocating the Money

The state apportionment procedure essentially performs two functions (at least in theory): 1) it tells the state how to distribute its funds to the districts; and 2) it tells the state how much money the districts need in order to cover a program of "basic education." The guarantee is, in effect, the state's statement of what it will take to provide that basic education for each weighted pupil in the state.

The Commission carefully considered the efficacy of the present formula of weighting to see if, indeed, the allocation is equitable. Of course, it must be strongly emphasized that the apportionment formula itself does not create funds, and cannot; it only distributes the funds the legislature appropriates.

But while reslicing the pie will not make the pie any larger, it can make certain that each share is more fairly apportioned.

Under the current weighting system:

- An elementary pupil is weighted 1.0. This is the base weight; every full-time student gets at least this much value in the formula.
- Each secondary school student receives an additional weighting of 0.3.
- Each full-time equivalent student in approved vocational classes receives an additional weighting of 1.0.
- Culturally disadvantaged students receive an additional weighting of 0.1 times 25 percent of the total disadvantaged students for an approved program.
- Staff gives additional weighting to a given district's weighted pupil total according to a staff weighting factor based on training and experience, since salary schedules generally reflect these criteria. The staff factor is supposed to help account for varying salary costs of the districts.
- Districts with "remote and necessary" elementary schools and/or small high schools receive an added weighting which varies according to a rather elaborate state schedule.

Hence, a secondary school student in an approved vocational education course, assuming he did not also happen to fall under any other weighting categories, would be weighted at 2.3, but only before the staff weighting factor was added in.

In fact, we have found that the staff weighting factor is key. In 1968-69, all factors together were responsible for a total of weighted pupils in the state 29 percent above the total of actual students. The staff factor, along with the secondary factor, contributed most to the additional weighting.

Once the students are weighted and the guarantee per weighted pupil is determined for a particular year, each district is accorded its proper amount, minus 85 percent of the local funds which are available to it. Local funds include regular property tax revenue, but not revenue from special levies, and income from the one percent real estate excise tax. The 85 percent figure is the "leeway factor" mentioned in Chapter 1, and the 15 percent allowed the local district is called "leeway."

There is one other current calculation which can affect the amount the local district must subtract from the state guarantee. This is the adjustment of the local property tax income from whatever level it is assessed in practice to the amount that would be raised if all property were assessed at the constitutionally required 50 percent of true and fair value. The difference between 100 percent of value of all properties in the county as determined by the state and the actual assessments of all properties is called the "county ratio," and in practical terms it means that if you are unlucky enough to be in charge of a school district in a county where the assessor is refusing to assess at the required 50 percent level, the state figures that is mostly your problem. The existence of some "leeway" (15 percent) in the formula helps a bit, but not nearly enough. This is a clear inequity, since the school districts have no legal role–and seldom any political voice–in setting county assessment policies.

Besides the apportionment fund, there are of course, separate accounts used to allocate funds for handicapped programs, vocational education, adult education, transportation, driver training, and special programs such as those in state institutions. Also, the state collects two mills of property tax (1.2 mills in nonhigh school districts) at the full 50 percent assessment level and returns these funds directly to the school district. This round-about allocation is a tacit, but clear, admission by the state that the regular local property tax is not adequate for the local districts. It admits the problem, but it does not really solve it.

A breakdown of all state funds is shown here for the school year 1968-69:[6]

---

[6] The amount of entitlement based on contracts for the 1970-71 distributed to the local school districts is $47,609,000. The amount they will receive during this fiscal year is:

83% of $47,609,000 =	**$39,515,470**
17% of the previous year or $30,477,000 =	**$ 5,181,090**
	$44,696,560

The URD appropriation is $6,054,000 for the 1969-71 biennium.

		Millions of Dollars
State Apportionment (the guarantee)		$248.6
Vocational-Technical Schools		3.9
State Institutions		2.6
Adult Education		0.5
Handicapped		14.9
Transportation		18.7
Driver Training		2.5
State Property Tax (2 mills)		26.2
Other State Funds		3.2
	Total	$321.1

The state apportionment, which in 1968-69 produced a guarantee of $368 per weighted pupil, is generally thought of and used as the main factor in balancing expenditures with revenue, but in reality the guarantee also effectively sets the minimum cost per pupil for the basic education which the state will support. Built into it are the fundamental cost levels for staff salaries, other school district costs, and student-teacher ratios, which the state apparently considers adequate.

How satisfactory is it?

To help answer this question, the Commission needed a streamlined way to calculate costs of education as they manifest themselves in actual district situations. An extensive analysis was made of teachers' salaries and then of all costs other than teachers' salaries. Some of the latter costs related to teaching, such as the costs of teacher aides, teacher benefits, textbooks and supplies; some related to the school itself, such as the principal's salary, the library, and counseling; and some related to the district, such as the superintendent's office, maintenance, and operations. These were costed out according to dollars per pupil and as a percentage of total "indirect costs" (costs other than teachers' salaries).[7]

---

[7]

	Average Dollars per Pupil	Percent of Total Indirect Costs
Costs Related to Teaching		
Teacher Benefits	16.5	5.0
Noncertificated Teachers	1.3	0.3
Teacher Aides	7.5	2.3
Supplies and Materials	12.2	3.7
Textbooks	6.7	2.0
Contracted Services	1.6	0.3
Capital Outlay	6.5	2.0
Travel	1.0	0.3
Subtotal	**$53.0**	**16.0%**
Costs Related to School		
Principal	42.2	12.8
Library — Books	4.5	1.4
— Other	15.3	4.6
Counseling	12.1	3.7
Extracurricular	4.5	1.4
Capital Outlay	7.0	2.1
Subtotal	**$86.0**	**26.0%**

	Average Dollars per Pupil	Percent of Total Indirect Costs
Costs Related to School District		
School Board	1.3	0.3
Superintendent's Office	19.0	5.8
Administration of Instruction	8.6	2.6
Pupil Services	8.0	2.4
Food Services	30.7	9.3
Operation	56.0	17.0
Maintenance	20.3	6.2
Audio-Visual	5.2	1.6
Educational TV	0.7	0.2
Miscellaneous	1.4	0.3
Subtotal	**$151.0**	**46.0%**
Transportation	**$41.0**	**12.0%**

On this list, it should be noted that food services and transportation are somewhat irrelevant to our cost analysis, since food services tend to be self-supporting and transportation is funded out of a special state account.

Comparisons were made with the costs of teachers' salaries and it was discovered repeatedly that a multiplication of 1.75 times teachers' salaries, divided by the number of students per teacher, would provide an accurate total of a district's over-all costs. The correlation of teachers' salaries to other costs was very close; given one, you could find out the other. In fact, according to our statistical analyses, a ratio of teacher salary costs to total costs or a ratio of all certificated staff costs would work almost equally well.[8]

An analysis which figured the indirect costs on a dollars-per-pupil basis was considered, but was discarded when it turned out to be substantially less reliable as an indicator of total costs than was the ratio analysis. The variability of indirect costs expressed as dollars per pupil was over three times the variability of the costs expressed as a ratio of salary costs to total costs.

Consideration also was given to costing basic education with a programmatic measure; *i.e.*, how much does each course cost? However, to answer that question requires answers to other questions, such as, what is the teacher's salary?; how many different subjects does the teacher teach?; and how many students can there be in the classroom? Such elements are far more crucial than those of books, materials, supplies, and so forth. The subject does not cost money. The teacher is what costs money. Therefore we fall back to the ratio of students per teacher as our standard measure for educational costs.

If then, we take the costs of a basic education to be those currently expended, we can make an equation of what a state guarantee would be, as follows:

$$\text{Guarantee} = \frac{(\text{Salary Level}) \times (\text{Total Costs/Salary Costs})}{(\text{Number of Students per Teacher})}$$

This equation should be able to tell us the basic education costs of a teacher's average salary or the number of pupils per teacher which should characterize the typical staffing pattern. Or it can be turned around to tell us what a state guarantee would be using this approach.[9]

Thus, using 1) the average 1969-70 teacher salary level in the state–\$9,338, 2) a total cost per district of 1.75 times the teacher's salary, and 3) 30 students per teacher, the guarantee would be:

$$\text{Guarantee} = \frac{(\$9{,}338)\,(1.75)}{30} = \$545$$

In fact, of course, the 1969-70 guarantee was only \$371. According to our calculations, if the schools had lived with this as their working definition of adequate basic education, something would have had to give. Either teachers would have had salary cuts or there would have had to be a new student-teacher ratio: specifically, 44 students to a classroom.[10] Clearly, the state is not meeting its constitutional charge.

The salient reason for the failure of the state guarantee to reflect true basic education costs is the apportionment formula's "staff characteristics" weighting factor. This factor simply is not sufficient at present to reflect the importance of salaries as the chief determinant of over-all costs. One way to correct this failing would be to increase the staff characteristics factor. Another and possibly superior approach would be to use the formula employed by the Commission to calculate over-all costs, and then apply its result against the state guarantee. A minimum state salary (determined by the Superintendent of Public Instruction) would be multiplied by 1.75 and divided by the desired number of pupils per teacher. A reasonable number of students might be 30.[11] This would provide the *minimum* guarantee figure. Then, in the case of each district the actual *average* salary level would be computed and the difference made to the guarantee would be added to that district's state funding.

---

[8] If certificated staff salaries (those of teachers and most administrators combined) are used, then the staff factor in the apportionment formula would have to be described in terms of certificated staff as well. Between the certificated ratio and the teachers' ratio, the variability in outcome is only about 15 percent, and most of this is found in the small districts. Either ratio tends to be slightly higher in both large and small districts. The resultant inequities, if any, in small districts could be accommodated by other means, such as "remote and necessary" funds.

A ratio characteristic of intermediate sized districts was selected for the comparisons cited here. A ratio based on teachers' salaries was selected because it more nearly represents the direct costs of education.

[9] The Commission was not unanimous in its support of this approach.

[10] The staff characteristics weighting factor, which effectively adds money to the basic guarantee, would have reduced this figure somewhat.

[11] There is no consensus on what is the ideal average class size. As a matter of practice, however, only one district over 1,000 students in state has a student-teacher ratio of over 30. Therefore, 30 seems a reasonable minimum figure.

Thus, let us say in 1969-70 a reasonable minimum salary of $6,500 would have been selected. Multiplied by 1.75 and divided by 30, the minimum guarantee would have been $379, and then each district would receive extra funds to the degree its *average* salary level was above the minimum.

Of course, the problem with simply guaranteeing state aid to meet the salary levels that exist on the district level is that the state would have no control over how high those levels might go. Consequently, the Commission considered at some length the possibility of a state salary schedule; *i.e.*, a uniform pay scale for the teachers of the state.

Since the salary study conducted for the Commission by Battelle showed that on the average, recent increases in teachers' salaries are not out of line with increases enjoyed elsewhere and among other professionals in this area, the over-all effect of negotiating salaries in each district can be said to have worked reasonably well. However, the present system does not force the legislature to come to grips with this extremely important cost factor. Consequently, state funding of actual school costs has lagged and soaring special levies have resulted.

In the view of the Commission, the problem of excessive special levies will persist until the state legislature provides both the money to pay teachers' salaries and a mechanism for keeping salaries up to date.

If this were done, some districts might submit levies to fund particular programs or to allow lower-than-average class sizes, but the defeat of such levies would not deprive any student of a "basic education." Among the other advantages of a state salary schedule is the fact that the local school boards would be relieved of the burden of salary negotiations, for which they often are unprepared. It also would eliminate unjustified salary differences between large and small districts, thereby placing the small districts in a more competitive position. As it is, salary maximums and averages both tend to decrease with decreasing school district size.

Although it seems quite evidently desirable to give the state control over salaries and thereby facilitate full state assumption of the costs of basic education, we recognize that some problems might arise with as a result of a state salary schedule. The budgeting cost would be very high, for example, if the state were to subsidize districts whose current salaries might be higher than the approved schedule.

The Commission believes that further study is required to determine such questions as:

- What salary ranges and intermediate steps would constitute an equitable salary schedule at this time, and how much would such a schedule cost?
- Should districts with salaries higher than the state schedule be subsidized until the schedule catches up to them?
- Should there be a cost-of-living adjustment according to differences in local economic conditions?
- Should the state schedule be mandatory, including salary maximums, or should local districts be allowed to pay higher salaries through special levy funding?
- What would be the impact of a salary schedule for certificated personnel upon other staff salaries?
- What would comprise the new salary negotiation process, and particularly, what would be the role of the legislature?

Commission Recommendations

1. **The concept of the state apportionment formula is sound and should be retained.**

The factors in the formula are what require modification. The present formula offers a means of compensating special student needs as a way of equalizing educational opportunity and of adjusting to the financial abilities of local districts to support their programs. The flexibility of the formula allows for reviews such as this one and for changes in weighting that reflect changed priorities.

2. **The secondary weighting factor should be eliminated.**

The present 0.3 extra weighting has the effect of deemphasizing elementary education *vis à vis* secondary school education. Yet a growing body of evidence points to the importance of the early years of learning in shaping ultimate potentialities.

Furthermore, weighting the secondary school student more than the elementary school student stimulates districts to set their funding priorities accordingly, even though discretionary use of these funds is intended. In our examination of costs in the state, the costs of secondary programs were 40 percent above those of elementary programs. We believe this trend should have no further encouragement.

In our studies, we also found that secondary teaching costs and textbook costs were 20 percent greater than those of elementary programs, chiefly because of higher teacher salaries. However, teacher salary differentials are adjusted elsewhere by the modified staff characteristics.

It should be said that elimination of the secondary factor is based on the assumption of an increased state guarantee. Given such as increase, the secondary factor elimination would have little net effect on most districts, since the proportion of secondary to elementary students is fairly constant across the state. It is true that nonhigh school districts would benefit more than others, but there are relatively few of them (77) and most have such high valuations on property that they receive nothing from the apportionment formula anyway.

The Commission is convinced of the need for school district reorganization and recommends a four-year period during which this should be accomplished.[12] At the minimum, nonhigh school districts should consolidate with high school districts. Until they have consolidated, nonhigh school districts should be required to pay the full pro rata student cost of educating their children in the receiving high school district. As an additional incentive to consolidation, the Superintendent of Public Instruction should be authorized to withhold the dollar difference between what the nonhigh districts would have received per elementary student under the old formula's secondary factor and what they would get under the new factor.

3. **The vocational weighting factor should remain 1.0. This is the maximum funding level for vocational programs, however, and only the demonstrated excess costs for vocational education should be funded.**

According to 1968-69 reported costs and student hours in vocational education, the weighting factor should have been only 0.29. If the secondary weighting factor were to remain at 0.3, there would be no need for the vocational factor at all. However, the Commission questions the adequacy of the data on which this conclusion was reached. (We understand that better data are becoming available.) Furthermore, we feel that the vocational side of common school programs needs further emphasis, and so we recommend the continued 1.0 weighting.

However, we believe a more careful accounting of true costs is needed in the vocational area. Although there seems to be little variation among different sized districts as to percentages of students taking vocational training, or among levels of expenditure on such training, there are substantial differences among individual districts. Also, costs among the vocational courses fluctuate considerably. Some which utilize large class sizes (home economics or typing, for instance) cost no more than academic courses; and, it turns out, such relatively inexpensive courses dominate the vocational curriculum. Consequently, the state should require ample evidence of high costs in vocational programs before districts are granted extra vocational weighting in the apportionment formula.

4. **Leeway should be eliminated and the state should subtract 100 percent, rather than 85 percent, of local funds from the guarantee.**

At 85 percent, this factor most benefits districts with high assessed valuation, notably a few of the larger districts and most of the very small districts. However, as just noted, many of the small districts have such high assessed valuation that even subtracting only 85 percent of their funds does not help them, since they are not eligible for state aid through the present apportionment formula anyway.

At 100 percent, this factor would affect all districts equally. One effect of the leeway was to help those districts whose assessments were set below the state's assumed level. However, if the county ratio is eliminated, the need for leeway will disappear.

---

[12] **See technical report sections dealing with effect of school district size and guidelines for school district reorganization.**

5. **The adjustment of actual assessment levels to an assumed 50 percent level by the use of the county ratio should be eliminated.**

It is unfair effectively to penalize a school district for a failing of the county assessor, an official over whom the district has no legal control. If the legislature wants to control assessing practices, it has more direct means at its disposal. Districts could lose a substantial amount of money if the county assessment level is decreased, particularly if the property tax base increases at the same time.

With the elimination of the county ratio, districts with high assessed value would tend to benefit most, but the concomitant elimination of leeway would help offset this advantage.

6. **The state-collected two mills of property tax should be eliminated. To compensate, local millage should be set at seven mills instead of six.**

In the past, when school districts collected on a 25 percent base and the state collected on a 50 percent base, the two mills collected by the state doubled the amount available to school districts (given the artificially low county assessment rates, the state's revenue, in practice, averaged about 2.5 times the amount that two mills would have raised at the local level). In 1968-69, the state's two mills raised $26.2 million.

However, there is less advantage to school districts in collecting the two mills at the state level now that the local assessment level has been doubled.

7. **A state-wide salary schedule should be considered, but further study is required before making a final decision.**

8. **Should the legislature not adopt a state-wide salary schedule immediately, there is compelling need for revising the staff characteristics weighting table to reflect more adequately actual salary conditions.**

Furthermore, monies appropriated by the legislature for salary increase purposes should be distributed through this characteristics table rather than outside the formula.

9. **In addition to the changes proposed above, the Commission also has recommended a new disadvantaged factor, the same vocational factor, new criteria for reimbursing transportation costs, kindergarten, exemplary research and development projects, expanded gifted child education programs, and funding at the present level for handicapped programs.**

These recommendations are covered in Chapter 2.

10. **In the case of any substantial change in the formula, actual implementation should be delayed one year from adoption to permit local districts time to plan adequately.**

How much will the new state program recommended by the Commission cost?

To determine the over-all effect of these recommendations both on the state and on local school districts, four basic alternatives were compared: 1) how districts were actually funded in the 1968-69 school year (the year for which complete data were available); 2) how districts would have been funded assuming a formula based on Commission recommendations and reimbursement for actual teacher salaries; 3) how districts would have been funded assuming a formula based on Commission recommendations and incorporating new staff weighting factors more closely approximating actual salaries; and 4) how districts would have been funded assuming a formula based on Commission recommendations and a state-wide salary schedule.

For purposes of this analysis, a state-wide salary schedule was assumed with a 1969-70 minimum teacher salary of $6,500. Three salary schedule ranges were considered: 1) a maximum salary 2.0 times the minimum (or $13,000); 2) a maximum 1.95 times the minimum; and 3) a maximum 1.90 times the minimum. Further, it was assumed that school districts with salary schedules higher than the state schedule would be subsidized by the state until such time as the state schedule caught up to them. In other words, districts would be reimbursed based upon the state schedule or their actual salaries, whichever was greater.

Table 1, which follows, indicates that the actual 1968-69 costs were $332.4 million. Had the state utilized the Commission's recommendations, including a student-teacher ratio of 30 to 1, and employed actual salaries in the formula, the costs would have been $391.5 million. Using the new staff weighting factors as proposed by the Joint Committee on Education in association with the Commission's recommendations, the costs would have been $383.5 million. The various salary schedule alternatives ranged from $401.3 million to $408.6 million.

Table 1

STATE COSTS

Formula Based on	State Costs (Millions of Dollars)
1968-69 Actual Distribution	$332.4
Alternative Methods	
Actual Salaries	391.5
New Staff Weighting Factors	383.5
Salary Schedule – 1.90 Range	401.3
– 1.95 Range	404.6
– 2.0 Range	408.6

Chapter 4

ASSESSMENT AND ACCOUNTABILITY

The Temporary Special Levy Study Commission set out to define "basic education" and then to develop a more equitable formula for funding it through state aid, hoping thereby to lessen the need for special levies. Obviously, additional state commitment of funds is also needed.

However, as a practical matter, most observers expect special levies of some amount to be with us for a long while. Greater state aid and an improved apportionment formula alone will not get them a warmer reception from the public, because the people and their representatives are becoming increasingly sophisticated about education and are demanding more and more of it. They particularly want to know that every dollar of tax money is spent wisely.

In the short run, moreover, an economic recession and something approaching a tax revolt make it all the more imperative that educators be extremely well prepared to defend their budgets. If they are not, they may face the fate of certain communities in Ohio and Missouri, where defeated levies have led to shortened school terms and staff pay cuts.

Unhappily, no state, including Washington, is able to give the public adequate information necessary to explain fully the need for higher levels of support for education. The data, and the tools to get them, are not available. Generally speaking, there are too few sophisticated measures for educators to use in evaluating the schools' performance and in making improvements, and there are too few ways for voters and their representatives to learn about either the performance or the improvements.

The Commission reached this conclusion through the "Washington State Inventory of School Quality Measures," a study to find out how much our schools know about themselves and their products, the students.

The inventory "instrument" (survey) was carefully prepared and circulated among leading educators. It covered four major areas: finances and economics (expenditures and revenue); personnel; program, curriculum, and process (what is offered and how many students use it); product, special recognition, and behavior (how well the students test, achieve distinctions, and discipline themselves).

Data were collected from 72 percent of the school superintendents in the state (319), 27 percent of the school directors, 44 percent of the Washington Education Association unit presidents, 24 percent of the Washington State Federation of Teachers unit presidents, and 45 percent of the Parent Teachers Association presidents. Students themselves would have been contacted, had it not been necessary to gather the data during the summer vacation period. Relatively little response came from those school districts with fewer than 200 pupils (35 percent), but all 38 of the state's largest districts provided data.

From the study it was found that a wide variety of quality measures are employed in the state; 75 percent of districts use at least the following:

1. Number of course offerings in total curriculum.
2. Teacher-pupil ratio.
3. Accreditation of secondary schools.
4. Percentage of students entering college.
5. Availability of psychological and counseling services.
6. Students' scores on standardized tests.
7. Number of college preparatory offerings.
8. Students' grades and grade point averages.
9. Availability of special education programs.
10. Per-pupil expenditure.
11. Annual expenditures for instructional supplies.

Information from such a list of quality measures may give the educator or the layman a superficial idea of how well the school is doing, but that is all. Very few school districts currently gather information on other relevant matters that bear on quality.

Perhaps equally significant, the Commission's inventory found that most districts fail to disseminate what data they do obtain. Teachers do not see them, parents and lay education groups do not see them, the media do not see them. Lack of staff to prepare such material for public consumption is one of several reasons given for this situation. However, it is the Commission's view that public understanding of the schools and public confidence in the validity of schools' claims on the public purse will not be improved until more and better measures of school performance are used and until the results of the measurements are made widely and easily available.

The Commission examined the record of two states, California and Florida, which have pioneered in education assessment and accountability. Their successes and failures should be instructive to Washington if it decides to develop a new evaluation mechanism of its own.

California is a particularly interesting subject for comparative study. The most populous state, it also has one of the best reputations among states for willingness to experiment and innovate in education. Backing this reputation is a "frontier attitude," extensive public concern, a traditionally supportive political climate, and consequently, one of the nation's highest levels of financial support. Many of the educational processes in the state are highly sophisticated and represent advanced management techniques. However, our study showed that confusion of objectives and a tendency to duplicate programs are also characteristic of the state.

Among the California organizations with capability in education assessment and accountability is the California Education Information System (CEIS), which provides computer services through 12 regional centers to approximately 40 percent of California state education agencies. The system maintains and coordinates a large number of bookkeeping functions among school districts and shares a good deal of the data with Sacramento.

Directly serving the State Department of Education is the California Education Information Management System (CEIMS), which is designed to gather and report raw data on such matters as school personnel credentials, apportionment, and state testing. Essentially it is an education data bank for the state legislature, the governor, the U.S. Office of Education, and other officials and agencies. Recommendations to expand the service areas are now under review.

The State of California also has a state-wide student testing program which operates under legislative mandate to obtain and publish in "readable form" data regarding intelligence and achievement test scores for all sixth- and twelfth-grade students in public schools. Results are published in "rank order form," along with community and school district characteristics, and indicate how well a particular district is faring compared with the other districts in the state. Reading tests are also given regularly in the elementary schools state-wide.

Florida has approached the assessment and accountability challenge directly with a 1968 study of major educational needs. This was the first step in establishing state-wide assessment criteria and an ongoing Educational Research and Development Program. The example set by the latter will be of value to the Washington Superintendent of Public Instruction, concerned legislators, school directors, and interested laymen in our state as they determine just what results education should be expected to produce. In Florida, the research and development program also is looked to by state officials and outsiders alike as a force for stimulating innovation in such matters as cost accounting and teaching techniques.

Florida, like California, has a state-wide testing program, in this case, covering the ninth and twelfth grades. However, since the testing program was developed in the 1930's, it needs substantial revision and reform to make it a more contemporary guide to funding allocation priorities. Under consideration is the possibility of closer state ties to the new National Assessment program conducted by the Education Commission of the states; both Florida and Washington State contribute data to this program. Unfortunately, the sample data currently being gathered by National Assessment is broken down in regional, rather than state, statistics, thereby diminishing its usefulness to state governments.

Commission Recommendations

1. **A state-wide program assessment system should be designed, field tested and implemented. Authorization should include at least one planning year and provide for wide consultation with all groups concerned with public education.**

An office should be created to plan and later operate the assessment program and the budgeting program that should accompany it (See Chapter 5). The office would report to the legislature.

School districts should participate in the development of the state-level objectives. Moreover, they should be encouraged to add their own educational objectives to the state's, and to measure them in order that a diversity of educational aims in the state can be expressed.

2. **The state-wide assessment program should not rely on only one or two measurements (as does New York State with its Regents Examinations), but should be "professionally responsible" in recognizing that the success of a district is measured in a number of separate, though interrelated parts.**

Under a comprehensive assessment, objective tests would be just one of a number of measurements which together would describe a district's performance. One would expect almost any district to "score" high on some parts of the assessment and low on others.

3. **The state-wide assessment should include in its examination the performance of special state programs such as vocational-technical education, handicapped, gifted, and disadvantaged.**

Such an assessment would set useful guidelines for later assessments of other programs on a continuing basis.

4. **Teachers, administrators and school board members should be involved in in-service training programs and district workshops which demonstrate the effective utilization of assessment findings.**

5. **Assessment findings should be widely disseminated to the general public with professional interpretation of the results by teachers, school executives, and school board members.**

6. **Those responsible for developing and implementing the state-wide assessment program should report directly to the legislature and its committees charged with review of common school policies.**

The program itself should be designed in such a way as to immunize it from partisan politics.

7. **The assessment program's operating agency should issue regular—annual or biennial—reports on the system's progress.**

8. **Materials used in the state-wide assessment program, including expenses such as computer time, should be funded by the legislature.**

Chapter 5

BETTER MONEY MANAGEMENT: PLANNED PROGRAM BUDGETING SYSTEM

Computereze is a worsening affliction of modern rhetoric. The new gobbledygook obviously has caught the fancy of academicians and bureaucrats alike since it enables a man with a simple thought to express it in a complicated manner whose incomprehensibility the unwary may mistake for profundity. If they ever had any meaning, words like "input" and "output" are fast losing it as they are corrupted for pseudosophisticated conversations on everything from international politics to baby-raising. There is even something called a "throughput," and it apparently is *not* a golfing expression.[13]

All of which is a shame because, as the Commission found, the discipline of systems analysis has a great deal to say to the world of schools. Particularly as regards budgeting practices, such analysis can give true depth to the concept of assessment and accountability. It is helpful to the layman, however, if some technical terms are translated. Roughly speaking, in our study of *Management Concepts Relating to the State of Washington Educational System* (see technical report for the full document), an "objective" is a measurable goal in education; an "input" is a resource, such as time or money or personnel, employed to reach an objective; an "output" is a result achieved; an "alternative" is a means of reaching an objective; a "process" is the operation that converts resources into results; and a "program" is a collection of activities which have common objectives.[14]

In the current budgeting system used in most districts–the "object-function system"–emphasis is placed on explaining the functional usage of resources. For example, categories of expenditures are specified, types of facilities are specified, and instructional materials (textbooks) are specified. But there is little attempt to discover how the resources are used and it is often very difficult to break out certain programs or "subprograms" (*e.g.*, grade-12 English) and see whether they are inadequately, adequately, or excessively funded. The emphasis on "object" (*e.g.*, money for maintenance or administration) instead of programs inhibits sensible planning. The temptation in the annual budgetary process is simply to make an automatic increment in each object for the coming year, instead of considering the utility of the programs. Yet a school exists to bring programs–mathematics, science, language arts, etc.–to the students, not to bring them personnel, maintenance, and administration. Under the present system, it is hard to evaluate performance, hard to set priorities, and hard to select least-cost alternatives.

Hence, a system of budgeting is needed that will gradually move from management of resources (with relationships to results only inferred), to a system which stresses the utilization of resources strictly in terms of their contributions to attainment of desired results. The needed system, our research and interviews persuade us, is a "Planned Program Budgeting System" (PPBS).

The case of PPBS rests partially on several assumptions of the Commission. One is that the state has limited funds available for the educational system and must be able to set priorities; another is that the purpose of common school education is to induce learning in young people, and that learning is a product much of which can be measured. We also have assumed that by analyzing the various activities that go into meeting the objectives of education–by costing them for effectiveness and by considering alternative ways of achieving the same or better results–the budgeting decisions can be sharpened greatly.

The PPBS is a fairly intricate operation, but it may be usefully explained further by a simple example. Imagine that you have $1,000 to accomplish several household chores; these include retiling the bathroom, constructing bookshelves for the den, reshingling the roof, and repairing the front steps. Let us suppose also that you are all thumbs and must solicit estimates from contractors. When the estimates come in, you select the lowest, which is in tabular form on following page.

Following a lengthy discussion with the contractor, who will not negotiate costs and who has informed you that any alteration in costs would result in an inferior product, you become aware that your $1,000 is simply insufficient to accomplish all you planned. Consequently, you must set some priorities. You decide that the roof comes first as it is leaking and cannot be tolerated any longer. The steps come

---

[13] A "throughput," according to Webster's Third International Dictionary, is "an amount of raw material put through processing or final finishing operations in a specific time (as 'in its initial daily throughput of 110,000 barrels'–Lamp)."

[14] Congressional testimony of John Shannon, Assistant Director, Advisory Commission on Intergovernmental Relations, October 1970.

PROGRAM-PRODUCTS

	Retile Bathroom	Bookshelves	Reshingle Roof	Repair Steps	Total
Item Wages	$ 50	$ 50	$300	$50	$ 450
Equipment Rental	5	10	50	10	75
Equipment Upkeep	0	5	10	5	20
Materials	100	60	400	20	580
Total	$155	$125	$760	$85	$1,125

next as they are hazardous. The family badly needs somewhere to place their magazines and books, so bookshelves come next. The bathroom is last; and it turns out that while the retiling is a desirable improvement, it lacks the urgency of the other claims on your money, so you postpone the bathroom project, happily pocketing $30 ($1,000 - $970 equals $30).

The homely illustration above points up important characteristics of the PPB System. The buyer had to recognize that he had limited resources ($1,000) and that he had identifiable results or outputs to achieve. He had alternatives (the contractors' bids) from which to choose. He set priorities and he allocated only enough resources to do what was in his means (he actually pocketed $30). The contractor also exhibited PPBS characteristics, as he allocated resources or inputs by program (*e.g.*, "Retile Bathroom"); and he refused to negotiate for resources as his experience told him that trimming the resources further would result in an inferior product.

An "object-function" approach to the same problem might have resulted in an attempt to cut back a bit, say, on equipment rental and a bit on materials, and might have resulted in doing all the jobs badly.

A Planned Program Budgeting System of course can vary somewhat in format according to the people developing it and the field in which it is used. The Commission is proposing for Washington an Educational Management Information System (EMIS) which we feel is particularly well suited to the needs of our state's common schools.

This sytem should mesh well with the rest of the state's assessment and accountability program proposed in Chapter 4. It will provide a uniform and understandable budgeting process for all levels of school authority–from the individual school to the district to the intermediate district to the state. Information on finances for decision makers, also at all levels, will be more easily available–and available faster–than it is today. At the same time it will be possible to project into future years the implications of present policies. Cost-effectiveness data will help educators to discover which programs are working well and which are working poorly, and the system will lay out clearly the alternatives for improvement. All decision makers will be able to establish priorities for allocation of scarce resources. They will be able to plan.

Under a PPBS for the common schools, legislators and other officials will be better prepared to ask tough questions of those expending the state's funds at the local level. Educators, for their part, will be better armed for defending policies and priorities they consider important.

It is not essential that all of this new system be constructed at once, but a start can and should be made now. Present reporting and collection of data on financial, pupil, teacher, and other assessment situations provide only minimal resources for a management system. Battelle Memorial Institute's collection of data for this report required extensive efforts to arrange, classify, and express before something meaningful could be presented. The lack of data in some districts and the variance of data among districts point to a need for both an expansion of data collections in the state and greater standardization of what is collected. With over 300 districts within our boundaries, only the state government itself can hope to establish a better reporting operation.

Meanwhile, since some districts are already proceeding with local implementation of PPB systems, state guidelines for budgeting become necessary too. At least four districts have developed versions of the complete PPB System. General use of computer technology, which is part of the PPBS process in most cases, is also spreading. Eight local education agencies and one intermediate district have substantial computer capacity now and are spending $2 million on it annually. There is some wasteful duplication. More serious, variances in the structures of the PPBS and the computer systems will hamper the eventual establishment of a state PPBS. A uniform approach should be established now.

Still, the state system recommended by the Commission should also be flexible enough to allow considerable local utility. The eventual state-level system must respond to the needs of the Superintendent of Public Instruction, local district management, and the legislature, while the local educational agency system must respond to the needs of boards of directors and other local citizens. In some regards the Educational Management System should provide centralization, in others, decentralization.

Given the support of the legislature, the state-level operation of the Educational Management System should not be difficult to establish; nor should it be difficult to institute the reporting function of the EMIS on the local level–bringing local data to the state. On the other hand, reporting is only one segment of a total management system for the schools. If the full system is to be implemented successfully throughout most of the districts in the state, it must win the voluntary commitment of local district leaders. A mechanism to involve the local districts in the preparation of the centralized state plan, therefore, is highly desirable.

Commission Recommendations

1. **The State of Washington should install a centralized Educational System at the state level. This office would manage both a PPB System and the state's Educational Management Information System.**

2. **The State should take leadership, with local involvement, in establishing a decentralized Educational Management System (PPBS) in the local educational agencies of Washington.**

The democratic process through which the state obtains the support of local districts for the decentralized PPBS should utilize advisory committees, the examples of model districts, and in-service training programs to explain the system. Not all local version of the system will be identical, but all districts should participate in the data gathering activities. A state-level staff should guide the decentralized system, but again, with support and advice from the local districts.

3. **The organization in charge of operating the state PPBS and the local PPBS should be called the Office for Educational Management Systems and should be fully responsible for planning and implementation of the system.**

Only one organization, we believe, should be in charge of educational PPB systems at the state level. Good cases can be made for location of this office in the present Office of the State Superintendent of Public Instruction, or in the executive department's Office of Program Planning and Fiscal Management; or for creating a special Commission of the legislature; or for creating a separate agency which would operate independently, but be responsible to both the SPI and the legislature. A choice among these options, which are detailed in the technical report, should be studied and decided by the legislature.

4. **The Office of Educational Management Systems should be staffed by full-time personnel, headed by a director, with assistant directors for objectives, program structures, data information, evaluation, and system syntheses.**

5. **It is important to the objectives of assessment, accountability, and planning that the Office of the Superintendent of Public Instruction should itself operate under a Planned Program Budgeting System.**

6. **A state-wide in-service training program should be conducted for Office of the Superintendent of Public Instruction personnel and administrators of local**

educational agencies, as well as for many concerned private citizens' groups to instruct them in the management principles of PPBS.

This program may prove expensive, although we have not costed it out, since a number of new personnel may be required to develop and operate it. Nevertheless, in the long run it behooves the state to have the system well understood and accepted by all affected parties.

7. **The State should establish a state-wide computer network, composed of satellite systems whose facilities can be shared by local districts and will be capable of basic application processing, preparing reports to the local agencies themselves, and consolidating data for assessment and accountability analysis at the state level.**

A great deal of expense in this program can be avoided by stressing time sharing of equipment capacity, and shared applications for such universal and largely similar school activities as grade reporting, student scheduling, and payroll (applications could be prepared by the state); and by stressing that decisions on new applications should be decided at the school management level and not solely by the personnel operating the computers.

8. **The Education Management System should operate on the principle of "management by exception."**

With the tremendous capacities of computers to turn out copious quantities of data, decision makers could be overwhelmed with information whose main thrust was to show that all is going well. This would waste time and money. We believe the system should be so devised that the only information reaching the decision maker is that which shows an unusual situation, either bad or good. If bad, alternatives can be studied for improvement. If good, decision makers will be able to profit from the example.

9. **The State should be prepared to provide state and local data for the Federal Government's own assessment system, the Management Appraisal System (MAS–also known as the Belmont system).**

It also may be in the interest of the state to model its system closely after that of the Federal system, again for the purposes of uniformity and also in hopes that learning the lessons of the Federal system may save money on the state level.

10. **Of immediate top priority, the state should establish a task force to begin planning the Educational Management System and to inaugurate an interim program for standardizing state and local data gathering and computer utilization. A program start should also be made at once to explain PPBS to all affected state and local officials.**

To implement a full PPBS probably would take 7-10 years and considerable cost. We recommend that first steps toward the full system be taken within the next biennium. These would include development of a state-wide in-service training program on performance objectives, and development of a state-wide program budgeting reporting system in order to avoid proliferation of local system variations.

Chapter 6

LOOKING FORWARD

It is one of the characteristics of our times that each level of government, frustrated within its own constraints, would like to fob off on some other level of government every troublesome responsibility. This is particularly true of the responsibility for education. The local school districts complain about the lack of state and Federal support; the Federal Government rebukes the states for failing to do more; and the states growl back at the Federal Government, and declare, in effect, that until Washington, D.C. produces the needed money, the local districts will have to bear the growing costs.

In the case of education, the buck should indeed stop at the state level. As the Advisory Commission on Intergovernmental Relations has said, "The states should be the senior partner when it comes to financing public elementary and secondary education." The ACIR's 1969 report, *State Aid to Local Government,* urged the states to "relieve the local school districts of virtually all of the responsibility for financing education."

The legal case for state government's responsibility is even stronger in Washington than in other states, for the historical reasons that were mentioned early in this summary report. Moreover, there are sound and, we belive, persuasive arguments beyond the legal case for a greater state assumption of education financing.

First, state aid in limited form does not really provide true equalization of education opportunity. Categorical criteria in an apportionment formula, however well considered, cannot accommodate the diversity of economic, logistical political conditions in the individual districts. Says the Advisory Commission on Intergovernmental Relations, "Only two ways remain for states to come to grips with local educational fiscal disparities. They can either consolidate local districts or attempt to neutralize local fiscal variations by progressively increasing state aid to all local districts in the state." We expect that Washington State will have to do both.

State take-over of educational funding also would ease the introduction of quality measurement mechanisms such as the assessment and accountability program this Commission has recommended. The localities, for the most part, simply lack the resources to do this job on their own. Furthermore, as long as the emphasis in government is on determining whether districts have parity in state financial aid, there probably will be substantially less emphasis on achieving parity in student achievement.

Another purpose served by increased state assumption of financial responsibility would be the diminution of the fiscal logic that presently underlies many of our zoning practices at the local level. Particularly in suburban jurisdictions, the requirement of large residential lot sizes is a fine way of holding down school costs, and hence property taxes. However, it also often is disruptive of sensible metropolitan growth planning.

Another reason for fuller state responsibility for education relates to inequities in the property tax. The recently defeated income tax amendment probably would have helped the schools considerably. However, one still can argue that relief of the household property taxpayer is of great importance and that state aid, gathered from other revenue sources, would advance that objective.

Finally, greater state assumption of educational financing is the only alternative to special levies; and special levies for maintenance and operation, when they are a routinely required aspect of education finance, constitute a major abuse of democracy. Educational accountability simply cannot be achieved through a popular vote, because an understanding of the relevant issues is achieved by few voters, while wholly extraneous issues can become crucial. Since a sizable fraction of the voters probably can be relied upon to vote against any spending measure on the ballot, however well justified, and since a 60 percent approval level is required for passage, a small number of voters can make a great difference in the ability of a school system to function. This puts undue influence over education into a few hands.

One needs little imagination to know what would happen if the other operational budgets of government were to be submitted annually for approval at the polls: representative government would collapse. That education has survived as well as it has so far is testimony not to the worth of the special levy as an instrument for budgeting, but only to the generally high regard people have for the institution of the public schools.

Some may say that full state assumption of education finance will result in atrophied local responsibility for programming. This need not occur if the state itself will reemphasize the rights of the local districts to administer the money the state provides. In fact, one might expect that as local administrators are relieved of the obligation to "sell" millage each year, they will have expanded time and energy to devote to improvement of the educational product. Moreover, even if the state eventually does accept in practice its full responsibility for school finance, localities will continue to need special levies for capital purposes and occasionally for a small portion of operational expenses.

We recognize that a larger scale of state support for the common schools will not occur overnight, especially in the present economic climate. Nonetheless, we propose it as a refreshed commitment for the state at this time. Unfortunately, the current trend is in exactly the wrong direction–toward a decrease in state aid.

We also have recommended a revised description of the "basic education" which the state should back in these days. We have offered too, a revised formula to reflect the basic education description and, hopefully, to ameliorate the miasma of special levies. Finally, we have underscored the value of better quality measurement in our common schools and have recommended a state program of assessment and accountability, including a new method of budgeting. It is imperative that all of us, whether in or out of government, get better information on how our money is spent in education.

The Commission studies, of course, have not answered all the problems posed by school finance, nor have they fully investigated all the opportunities in this field.

We also have left to another study, hopefully one conducted by the legislature itself, the difficult problem of determining what agency should organize and administer the assessment and accountability programs we have urged.

Similarly, while we have prepared papers (see the technical report) on the state programs for the gifted, and for Indians and migrants, we believe the legislature would do well to expand the research going into these fields.

Two programs which interested the Commission but which did not fall directly within our purview also deserve the detailed consideration of state officials and the concerned public. One is performance contracting, a program in which business firms are hired to teach children, and are paid according to their success. Here, at least in theory, is a system of direct accountability. Programs are monitored not only in fiscal terms, but in terms of student achievement. Both the U.S. Office of Education and the Office of Economic Opportunity have been funding experiments with the concept, and a number of schools in the nation, including some in Washington State, have projects now operative.

The purported advantages of performance contracting include the incentives they provide for efficiency in the classroom; the use of advanced programming of material in such courses as mathematics and reading; and the initial and continuing management planning to get results. For the school systems, however, perhaps the most persuasive argument is that failure of the contracting company to get the promised results leads to reduced payment for the work.

Performance contracting has a number of strong critics, and among other things, they accuse it of introducing the "hucksterism" of business into the profession of teaching; of threatening to dehumanize the classroom; of promoting "teaching to the (standardized) test"; of sowing distrust among teachers; and of subverting the collective bargaining process.

The debate on both sides is extensive and this Commission did not come to a decision on the long-term desirability of this proposed educational technique. We did prepare a paper on the matter (see technical report) and we do urge continued research and development.

Another controversial educational proposal which we believe deserves further research and development is voucher education. The U.S. Office of Economic Opportunity, using a model prepared by the Center for the Study of Public Policy in Cambridge, Massachusetts, is about to sponsor one or more demonstration projects in the nation to decide the worth of an educational system in which parents may use government money to send their child to any public, private, or parochial school. Seattle, Washington is one of the cities considering and being considered for a demonstration project.

Under the project, a demonstration area containing 10,000-15,000 students within a school district would be designated for a field test lasting from six to eight years. Each child in the area would receive a voucher worth the money expended per pupil in the public schools today. The parents of the child could then "purchase" education at any participating school which could meet certain standards. Such schools would have to show that admissions policies were nondiscriminatory, that voucher money was not used to teach religion, that no extra payment from the parents would be asked or accpeted, and that adequate information would be made available to the parents regarding the school's policies, the student-teacher ratios, financial position, and other pertinent facts.

OEO hopes the demonstration projects will show that a voucher system produces greater diversity of educational offerings and the chance for parents to select an education more closely tailored to their child's needs and interests. Also, greater freedom to experiment with new programs, it is said, would be possible under a voucher system. Moreover, disadvantaged children, whose vouchers would be supplemented by added OEO funds, would get extra attention in both public and private schools. Finally, it is hoped that parents would be enthusiastic about the freedom of such a system and that fresh support for education generally would develop in the community.

Clearly, if a voucher system is widely implemented the nature of the "public" system would change. In a sense, former "public" schools would become more private in the sense of catering to a special constituency. Decisions relating to curriculum, in particular, would be decentralized. Former "private" schools, on the other hand, would become more public, not only in terms of financial support, but in accountability.

However, some critics charge that public education not only would change, but with competition from private schools, would be destroyed. Further, they say that despite the proclaimed nondiscriminatory admissions policies, the voucher system would lead to a kind of voluntary segregation. (OEO, however, has said it will cancel the projects if that happens.) Many teachers fear that negotiations for salaries would be undermined by greater decentralization of power within districts. Some other people are also concerned about the church/state questions that are raised by public support of religious schools, even if the public money is not used directly to teach religion.

These questions and others obviously require detailed examination, and such examination is now going on in the Seattle school system under a special feasibility grant from OEO. Even operation of a limited demonstration project will require state legislative approval, however. The Commission as a whole did not make a judgment on the long-range desirability of the voucher system, although one Commission member and a staff member attended a four-day national conference on the subject. We do believe in the utility of a demonstration project, so long as it is carefully and objectively evaluated.

It has been with an open mind, we hope, that we have considered many of the top questions concerning education. In most other cases, the Commission not only has had an open mind, but has been able to reach a collective decision on the important choices that face this state in the years ahead. We did not believe these choices should or could be put off by ourselves. We do not believe they can be put off by the government of the state. On the contrary, only if those responsible for education in Washington will make it their commitment to plan the future and not just plan for it, will the prospects remain bright for increasing excellence in the learning of our youth.

Chapter 7

THE POSSIBILITY OF METROPOLITAN FUNDING

The Commission has called for greater state assumption of educational finance, but we also have recognized the likelihood of continued reliance on special levies at the local level for the next few years. Unfortunately, even those few years could prove extremely damaging to certain school districts.

The most serious situation exists in King County, with 40 percent of the state's school children. A pattern has developed there which points to increasing difficulty in securing levy approval in Seattle, despite the fact that Seattle asks for a one half to three fifths lower millage levy than do most of its suburbs. Although the suburbs have a smaller than average tax base, they have voters with higher than average concern for public education and higher than average incomes to support added taxes. Moreover, the percentage of parents with school-age children is considerably greater in the suburbs than in the core city.

The danger is that the decreasing numbers of parents with school-age children in Seattle may soon lead to school levy failures which would seriously detract from the quality of education in the city. This in turn would spur an even greater exodus of parents and a still worse atmosphere for levy passage. The resulting deterioration of Seattle schools and the alienation of city from suburbs would damage the whole fabric of metropolitan life.

The Commission, whose members are widely representative of the state's geography, have concluded that the problem of King County is probably unique at this time. Yet it also is of state-wide importance, involving as it does, so large a percentage of the state's children. Therefore, we would recommend a further study of the problem and its solutions, under state auspices, with participation by legislators, educators, and King County citizens.

One possible solution that should be examined is the development of a metropolitan system for funding school operations, using both the excise tax and the property tax. A separate educational finance district would be created covering the Seattle School District and suburban districts. Special levies would be voted upon area-wide and funds from all taxes would be shared equitably, taking into account actual salaries paid to teachers in each district and the costs of providing education to disadvantaged students.

The suburbs would obtain the advantage of Seattle's larger tax base and Seattle would be able to shore up its support for special levies with suburban parents. Of course, the levies would continue to require 60 percent approval, but on a metropolitan base.

Because it would be desirable to avoid additional property tax burdens on those with limited incomes residing in the core city, special attention should be paid to developing sources of excise tax revenue for funding urban schools.

Although any future study of this problem could also review the desirability of administrative consolidation of school districts, this Commission's study indicates that larger districts are more costly and also tend to lose contact with the individual citizen. Accordingly, one probably would not desire a metropolitan-wide school district, except for finance.

APPENDICES

Appendix A

THE EFFECT OF THE COMMISSION'S RECOMMENDATIONS

It will be remembered from the body of the summary report that four possible funding situations were set up and compared by the Commission to arrive at a picture of the effect of its recommendations on the local districts and on the state as a whole. These alternatives were:

1. Funding of the districts based on the actual figures for the 1968-69 school year.
2. Funding based on the formula recommended by the Commission plus reimbursement for actual teachers' salaries.
3. Funding based on the recommended formula and incorporating new staff weighting factors more closely approximating actual salaries.
4. Funding based on the recommended formula and a state-wide salary schedule.

The state-wide salary schedule was set up using $6,500 as the minimum teacher salary (this was the actual minimum for 1969-70). Based on this figure, three salary ranges were hypothesized and compared:

1. Maximum set at 2.0 times the minimum.
2. Maximum set at 1.95 times the minimum.
3. Maximum set at 1.90 times the minimum.

It was also decided, for purposes of this analysis, that the state would continue to subsidize those districts with salary schedules higher than the state schedule until the latter caught up. In other words, the districts would be reimbursed according to their actual salaries or the state schedule, whichever was the greater.

The tables below show the resulting costs to the state and the effect of various other factors on those costs using the funding situations described above.

STATE COSTS

Formula Based on		State Costs (Dollars in Millions)
1968-69 Actual		$332.4
Actual Salaries		391.5
New Staff Wtg. Factors		383.5
Salary Schedule –	1.90 Range	401.3
	1.95 Range	404.6
	2.0 Range	408.6

EFFECT OF STUDENT-TEACHER RATIO ON STATE COSTS

Students Per Teacher	State Costs Based on		
	Actual Salaries	New Staff Weighting Factors	State Salary Sched.[1]
	(Dollars in Millions)		
23	$524.9	$514.6	$542.0
26	458.9	449.8	474.1
30	391.5	383.5	404.6
35	328.9	322.0	340.2
40	282.1	275.9	291.9

AVERAGE STATE FUNDING

(Dollars per Pupil)

Minimum District Enrollment (FTE)	Formula Based on			
	1968-69 Actual	Actual Salaries[2]	New Staff Wtg. Factors[2]	State Sal. Sched.[2,3]
20,000	$410	$520	$483	$525
10,000	423	520	491	520
5,000	441	513	506	527
2,600	450	509	523	532
1,600	444	495	506	524
1,000	462	488	520	537
500	425	436	469	496
200	446	452	482	522
0	498	483	525	521

AVERAGE STATE PLUS NORMAL LOCAL FUNDING

(Dollars per Pupil)

Minimum District Enrollment (FTE)	Formula Based on			
	1968-69 Actual	Actual Salaries[2]	New Staff Wtg. Factors[2]	State Sal. Sched.[2,3]
20,000	$544	$672	$635	$677
10,000	542	652	623	652
5,000	542	626	619	640
2,600	542	611	626	634
1,600	558	624	634	652
1,000	575	614	646	663
500	567	596	628	656
200	619	646	677	717
0	721	736	777	774

---

[1] At a maximum salary 1.95 times the minimum salary.

[2] Based on 30 students per teacher and indirect costs 1.75 times teacher salaries.

[3] Based on a minimum salary of $6,500 and a maximum 1.95 times the minimum.

AVERAGE STATE PLUS LOCAL AND SPECIAL LEVY FUNDING

(Dollars per Pupil)

Minimum District Enrollment (FTE)	Formula Based on			
	1968-69 Actual	Actual Salaries[1]	New Staff Wtg. Factors[1]	State Sal. Sched.[1,2]
20,000	$707	$708	$708	$711
10,000	695	707	707	707
5,000	616	643	640	653
2,600	591	618	632	640
1,600	621	641	651	664
1,000	603	623	648	664
500	620	629	646	666
200	713	722	736	753
0	827	840	862	861

AVERAGE SPECIAL LEVY

(Dollars per Pupil)

Minimum District Enrollment (FTE)	Formula Based on			
	1968-69 Actual	Actual Salaries[1]	New Staff Wtg. Factors[1]	State Sal. Sched.[1,2]
20,000	$163.2	$ 36.0	$ 73.2	$ 33.9
10,000	152.6	55.0	83.7	55.0
5,000	74.2	16.6	20.6	13.3
2,600	49.0	8.6	6.3	5.6
1,600	63.3	18.6	17.3	11.9
1,000	28.3	8.9	1.8	0.6
500	53.0	33.0	18.3	10.1
200	93.5	76.2	59.2	36.1
0	105.8	103.8	85.1	86.6

AVERAGE SPECIAL LEVY

(Mills Based on 50% Assessed Valuation)

Minimum District Enrollment (FTE)	Formula Based on			
	1968-69 Actual	Actual Salaries[1]	New Staff Wtg. Factors[1]	State Sal. Sched.[1,2]
20,000	9.5	2.10	4.25	1.97
10,000	10.4	3.75	5.71	3.75
5,000	5.9	1.32	1.63	1.06
2,600	4.4	0.77	0.56	0.50
1,600	4.2	1.25	1.16	0.80
1,000	2.0	0.63	0.13	0.04
500	2.8	1.73	0.96	0.53
200	3.8	3.07	2.38	1.46
0	2.7	2.66	2.18	2.22

---

[1] **Based on 30 students per teacher and indirect costs 1.75 times teacher salaries.**

[2] **Based on a minimum salary of $6,500 and a maximum 1.95 times the minimum.**

Looking at just the pattern of state aid to school districts, the following differences appear noteworthy:

- The actual 1968-69 formula tended to increase state aid as school district size decreased.
- By contrast, reimbursing districts based on actual salaries tends to decrease state aid with decreasing school district size.
- The new staff weighting factors tend to distribute more money than warranted by actual salaries to districts with fewer than 5,000 students and substantially less money than actual salaries to larger districts. In fact, the new staff factors tend to maximize state aid to districts between 1,000 and 5,000 students. Apparently, these factors do not adequately describe actual salary distribution.
- The state salary schedule tends to provide about the same level of state aid to all districts regardless of size.

Looking at the pattern of state plus normal local funding (not counting special levy) to school districts, the following differences appear noteworthy:

- The actual 1968-69 formula resulted in nearly constant state plus local funding of school districts with more than 2,600 students (at about $542 per student). A very substantial increase occurred in smaller districts.
- By comparison, the actual salary alternative would result in high state plus local funding to districts with more than 10,000 students, minimum funding between 500 and 1,000 students, and substantially increased funding to smaller districts. This tends to fit the pattern of expenditures in school districts.
- The new staff weighting factors, on the other hand, result in a funding pattern similar to the actual 1968-69 formula. The result is substantially more funds for smaller districts (less than 5,000 students) than in the actual salary case.
- A state salary schedule results in about the same amount of money as the actual salary case going into larger districts. But more money also goes into intermediate and smaller sized districts. The amount of money going to smaller districts is highly dependent upon how high a salary schedule is picked. At a $6,500 minimum and a maximum of 1.95 times the minimum, the schedule would provide more funds to districts smaller than 5,000 students than would the new staff weighting factors. The actual salary option tends to dominate in larger districts.

As a result of this pattern of state and normal local funding, the effects on special levies of these alternatives are as follows:

- Under the 1968-69 actual formula, special levies were highest on both a dollars-per-pupil and a millage basis in districts larger than 10,000 students. They also tended to be high on a dollar-per-pupil basis in districts smaller than 500 students, but on a millage basis these small districts were low.
- The actual salary alternative resulted in reduction of levies in districts larger than 1,000 students and particularly in districts larger than 10,000 students. The effect on smaller districts was not as great. This alternative also results in a substantial increase in total funds to districts between 1,000 and 10,000 students—those districts, generally, having lowest expenditures per pupil.
- The alternative based on new staff weighting factors does not reduce levies in larger districts to the extent that either the actual salary or salary schedule alternatives do. This alternative particularly relieves levies in districts smaller than 2,600 students in comparison with the actual salary alternative. It also provides more total funds to districts smaller than 5,000 students than does the actual salary alternative.
- The salary schedule alternative tends to benefit all districts more than either of the other two alternatives. Levies on both a dollar-per-pupil and a millage basis tend to be minimized regardless of district size. Districts smaller than 10,000 students tend to get more funds over all.

Shown below is a comparison of the four alternatives on the basis of the number of districts with levy millage in a certain range.

COMPARISON OF ALTERNATIVES – NUMBER OF DISTRICTS PER LEVY MILLAGE RANGE

(Millage Based on 50% of Assessed Value)

	Number of Districts			
Millage Range	1968-69 Actual	Actual Salaries	New Staff Wtg. Factor	Salary Schedule
0	112	147	178	205
0- 0.5	14	13	15	16
0.5- 1.0	11	13	16	13
1.0- 1.5	15	18	18	14
1.5- 2.0	13	20	13	16
2.0- 3.0	30	34	25	15
3.0- 4.0	25	22	20	13
4.0- 5.0	18	17	5	8
5.0- 6.0	18	8	9	10
6.0- 8.0	18	17	16	9
8.0-11.0	27	13	7	6
11.0-15.0	21	5	4	2
15.0-24.0	6	3	4	3
Over 24.0	2	0	0	0

Several alternative salary schedules were also investigated. Each of these results in the same pattern of fund distribution discussed previously, but the level of funding varies somewhat, as described below:

- Based on 30 students per teacher, the increased cost to the state in 1968-69 would have been $68.9 million for a salary schedule range of 1.90, $72.2 million for a range of 1.95, and $73.5 million for a range of 2.0.
- Subsidizing districts for salaries higher than the schedule substantially increases state costs. Based on 1969-70 average salaries and 30 students per teacher, the number of districts receiving subsidies and the amounts involved are shown below:

Salary Range	No. of Districts	Subsidy (Dollars in Millions)
1.90	57[1]	$13.5
1.95	43[1]	9.7
2.0	33	6.6

A listing of these districts and the funding required for each is shown in the following table (for the 1.95 salary range case).

- Of the 15 districts in the state larger than 10,000 students, only two (Spokane and Yakima) would not have qualified for a subsidy at a salary schedule range of 1.95.

---

[1] **Includes 17 of the 21 districts in King County.**

ADDITIONAL FUNDS REQUIRED TO REIMBURSE ACTUAL SALARIES

District	Subsidy
ABERDEEN	13835
AUBURN	86827
BAINBRIDGE	2012
BELLEVUE	1032513
BLUE CREEK	1333
BURLINGTON E.	4455
CLEARWATER	219
CLOVER PARK	60317
CONWAY	1347
EDMONDS	602223
EDWALL	1167
ENUMCLAW	17015
EVALINE	3366
EVERETT	421968
EVERGREEN	1868
FAIRVIEW	1442
FEDERAL WAY	182146
GOLD BAR	8972
HIGHLINE	781931
ISSAQUAH	24712
KENT	419894
LAKE WASHINGTON	320469
MALAGA	4314
MERCER ISLAND	247451
MONITOR	11282
MUKILTEO	59773
NORTHSHORE	319151
OAK HARBOR	65153
PORT ANGELES	72883
RENTON	953408
RICHLAND	110485
SEATTLE	2585913
SHORELINE	517610
SNOQUALMIE V	3410
SOUTH CENTRAL	86481
TACOMA	233026
TAHOMA	36347
VANCOUVER	353327
VASHON ISLAND	48642

TOTAL $9,698,685

Appendix B

ENGROSSED HOUSE BILL NO. 893

State of Washington
41st Extraordinary Session

By Representatives McCaffree,
Bledsoe and Julin
(By Executive Request)

Read first time April 4, 1969, and referred to Committee on Revenue and Taxation.

AN ACT Relating to revenue and taxation; creating a temporary special levy study commission and setting forth its powers and duties; providing an expiration date; and declaring an emergency.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF WASHINGTON;

NEW SECTION. Section 1. As used in this act, unless the context indicates otherwise, the following words and phrases shall have the following meaning:

(1) "Commission" means the temporary special levy study commission: and

(2) "Common schools" means schools maintained at public expense in school districts of the state and carrying on a program from kindergarten through the twelfth grade, or any part thereof, including vocational education courses.

NEW SECTION. Section 2. The forty-first legislature has before it several proposals to reform the tax structure of the state. A primary goal of all such tax reform proposals is the reduction of property taxes attributable to special school district levies for maintenance and operation purposes and the replacement of these revenues with the proceeds of a state income tax. To properly accomplish this goal will require a detailed study of all factors affecting financing of the common schools of the state to assure that state tax revenues are applied in a manner to provide equal educational opportunities to all common school students of the state.

NEW SECTION. Section 3. There is hereby created the temporary special levy study commission which shall meet, act, and conduct its business at any place within the state of Washington.

NEW SECTION. Section 4. The commission shall have the following membership:

(1) Four senators to be selected by the president of the senate, not more than two of whom shall be from the same political party, and four representatives to be appointed by the speaker of the house, not more than two of whom shall be from the same political party;

(2) One member from among the membership of the joint committee on education appointed by the chairman of the joint committee on education and one member from among the membership of the legislative budget committee appointed by the chairman of the legislative budget committee;

(3) The state superintendent of public instruction or his designated representative;

(4) One member to be appointed by the state board of education, who may be a member of the board;

(5) Seven members to be appointed by the governor, one from each United States congressional district in the state, no more than four of whom shall be members of the same political party;

(6) Two members to be appointed by the president of the Washington state school directors association; and

(7) Six members to be appointed by the state superintendent of public instruction, three of whom shall be certificated employees of school districts within the meaning of RCW 28.72.020, and three of whom shall be chief administrative officers of school districts in the state, one of which shall be a county or intermediate superintendent of schools. In making the appointments under this subsection (7), the state superintendent of public instruction shall give equal representation, insofar as possible, to school districts located in large urban areas of the state, school districts located in suburban areas, and school districts located in smaller communities and located in suburban areas, and school districts located in smaller communities and rural areas of the state. In addition, when making appointments of certificated employees, the state superintendent of public instruction shall give consideration to persons who may be nominated by employee organizations as defined in RCW 28.72.020.

NEW SECTION. Section 5. The members of the commission shall receive no compensation but shall receive per diem in an amount not to exceed twenty-five dollars per day while attending to the business of the commission, and their necessary travel expenses. Payment of per diem and expenses shall be made upon vouchers approved by persons designated by the commission.

NEW SECTION. Section 6. The commission, by majority vote, shall select from among the members a chairman, and, by majority vote, shall appoint and fix the salary of a fulltime executive secretary who shall not be a member of the commission. The commission or its executive secretary shall employ such staff as the commission may deem appropriate. The commission is authorized to retain professional consultants as deemed necessary to further the purposes set forth in this act.

NEW SECTION. Section 7. The commission, by majority vote, shall select appropriate subcommittees and prescribe rules of procedure for itself and its subcommittees which are not inconsistent with this act. Both the commission and any subcommittee shall be authorized to conduct hearings throughout the state and shall have power to require data from all school districts, the state superintendent of public instruction, the state board of education, and all other public officials and agencies concerned with education in the state of Washington and from such other public officials and agencies as may provide information helpful to the commission in carrying out its functions. In furthering the purposes of this act, the commission shall have authority to select and consult with interested citizen groups. Such groups shall not receive expenses as otherwise in this act provided for.

NEW SECTION. Section 8. The commission is hereby directed to study the programs, problems and financial needs of the common schoos of the state, including but not limited to:

(1) The methods by which revenues are obtained by the common schools of the state, including regular and special property tax levies and the formula under which state funds are allocated to school districts;

(2) Those courses of study now financed by state, local and federal funds in the common schools of the state;

(3) The extent to which courses of study vary between school districts of the state, and between common schools within any school district;

(4) The extent to which variations in courses of study are related to the amount of revenues a school district obtains from special tax levies for maintenance and operation purposes;

(5) The costs of providing a basic education program in the common schools of the state and the variations in salary schedules and other costs which may exist from one school district to another; and

(6) A comparison between school districts in parts of the state showing the ratio of the number of classroom teachers to the total number of employees in each district; and

(7) Study possible solutions to the inequity arising because of differences in the amount of special levy revenue raised per student by a one mill increase in property taxation in one district relative to other districts; and

(8) The amount of state funds necessary and methods by which such state funds may be allocated each school district to insure an equal educational opportunity to each common school student in the state.

NEW SECTION. Section 9. The commission shall submit to the governor and the legislature, a preliminary report no later than December 15, 1969 and a final report no later than December 15, 1970. Such reports shall disclose the findings of the committee and its recommendations, which recommendations shall include:

(1) Recommended courses of study which should be included in a basic education program in each school district of the state, the financing of which should be assured by state revenues;

(2) Recommended levels of state expenditures to assist local school districts in financing the maintenance and operation of the common schools of the state;

(3) Recommended methods of measuring variations in costs between school districts, and allocating state funds to school districts of the state; and

(4) Any other recommendations of the commission for changes in state laws and administrative regulations necessary in the judgement of the commission to assure an equal educational opportunity to all common school students of the state.

NEW SECTION. Section 10. The commission may add to the funds made available by the legislature for the administration of this act any federal funds which may be available to the state of Washington for research in common school education under the terms of an act or acts of congress, or any private grants or gifts: PROVIDED, That such federal or private funds may be allocated and expended in accordance with the authority, powers and procedures accorded the commission in this act.

NEW SECTION. Section 11. This act shall be of no further effect after March 31, 1971, and the commission herein created shall be deemed abolished at such time.

NEW SECTION. Section 12. If any provision of this act, or its application to any person or circumstances is held invalid, the remainder of the act, or the application of the provision to other persons or circumstances is not affected.

NEW SECTION. Section 13. This act is necessary for the immediate preservation of the public peace, health and safety, the support of the state government and its existing public institutions and shall take effect immediately.

Filed 4:50 p.m. May 16, 1969
A. Ludlow Kramer
Secretary of State

Passed the House May 12, 1969
/s/Don Eldridge
Speaker of the House

Approved May 16, 1969
/s/ Daniel J. Evans
Governor of the State of Washington

Passed the Senate May 12, 1969
/s/John A. Cherberg
President of the Senate

TABLE OF CONTENTS

BASIC EDUCATION FOR WASHINGTON'S COMMON SCHOOLS 1

Present Status 3

Purposes of This Study 3

Procedures 3
  Current status assessment 4
  Citizen opinion survey 4
  Literature survey 4

Major Findings 5
  The current status of basic education in Washington 5
  The future of basic education in Washington 6

Recommendations 6
  Concerning curriculum and instruction 7
  Concerning special groups of students 10
  Concerning student services 13
  Related to instructional materials 13
  Related to staffing 14
  Related to teacher salaries 14

Bibliography 159

Appendix A 17
  Part One: Summary 19
    Purpose of the opinionnaire 19
    Sample and return 19
    Notes on the interpretation of this report 19
    Criteria related to students 20
    Criteria related to curriculum 22
    Criteria related to services 25
    Criteria related to instructional resources 26
    Criteria related to finance and administration 27
    Tables
      1. Number of Opinionnaires Sent and Returned 19
      2. Districts From Which No Response Was Received 20
    Attachment:
      Opinionnaire: Basic Education Criteria for the Common Schools of the State of Washington 31

  Part Two: Responses of All Respondents to Opinionnaire 35
    Instructions for interpretation 35
    Criteria related to students 35
    Criteria related to curriculum 38
    Criteria related to services 40
    Criteria related to instructional resources 41
    Criteria related to finance and administration 42

Part Three: Responses of Board Chairmen to Opinionnaire 47
Instructions for interpretation 47
Criteria related to students 47
Criteria related to curriculum 50
Criteria related to services 54
Criteria related to instructional resources 56
Criteria related to finance and administration 57
Additional criteria 62

Part Four: Responses of WSFT Presidents to Opinionnaire 63
Criteria related to students 63
Criteria related to curriculum 66
Criteria related to services 69
Criteria related to instructional resources 71
Criteria related to finance and administration 73
Additional criteria 77

Part Five: Responses of WEA Presidents to Opinionnaire 79
Criteria related to students 79
Criteria related to curriculum 82
Criteria related to services 85
Criteria related to instructional resources 87
Criteria related to finance and administration 89
Additional criteria 93

Part Six: Responses of Superintendents and Intermediate
District Superintendents to Opinionnaire 95
Criteria related to students 95
Criteria related to curriculum 98
Criteria related to services 102
Criteria related to instructional resources 104
Criteria related to finance and administration 105
Additional criteria 110

Part Seven: Responses of PTA Presidents to Opinionnaire 111
Criteria related to students 111
Criteria related to curriculum 114
Criteria related to services 118
Criteria related to instructional resources 120
Criteria related to finance and administration 121
Additional criteria 126

Appendix B 127
Opinions of Local Leaders Regarding Washington's Educational Programs 129
Commission purpose 129
Public discussion and opinion 129
The seven major elements of the educational program 130
Early childhood education 131
Elementary and middle school education 131
High school education 131
Vocational-Technical education 131
Special services for pupils with special needs 132
Learning materials 132
Administrative services 132

Tables:

1. Opinionnaires Completed by Persons in Each of 13 Occupational Groups 133
2. Numbers of Opinionnaires Pertaining to Each Conference Subject 134
3. Numbers and Percents of 206 Local Leaders Favoring Various Degrees of Emphasis on Each of 9 Types of Early Childhood Service and Education 135
4. Numbers and Percents of 352 Local Leaders Favoring Various Degrees of Emphasis on Each of 46 Elements of Elementary and Middle School Education 136
5. Aspects of Elementary and Middle School Education for Which More Than 50 Percent of Participants Favored More Emphasis 139
6. Aspects of Elementary and Middle School Education for Which Between 10 and 23 Percent of Participants Favored Less Emphasis 141
7. Numbers and Percent of 363 Local Leaders Favoring Various Degrees of Emphasis on Each of 75 Aspects of High School Education 142
8. Aspects of High School Education for Which Over 50 Percent of Participants Favored More Emphasis 146
9. Aspects of High School Education for Which 10 Percent, or More, of the Participants Favored Less Emphasis 148
10. Numbers and Percent of 342 Local Leaders Favoring Various Degrees of Emphasis on Each of 40 Elements of Vocational-Technical Education 149
11. Numbers and Percent of 151 Local Leaders Favoring Various Degrees of Emphasis on Each of 8 Types of Special Services For Pupils With Special Needs 152
12. Numbers and Percent of 130 Local Leaders Favoring Various Degrees of Emphasis on Each of 10 Types of Learning Materials 153
13. Numbers and Percent of 338 Local Leaders Favoring Various Degrees of Emphasis on Each of 20 Aspects of Administrative Services 154

COMMONALITY ANALYSIS 161

Summary and Conclusions 163
  Introduction 163

Section 1–General Description and Classification of School Districts 165
  Introduction 165
  Definition of school size groups 165
  Grade spans 165
  Urban-rural classification 171
  Assessed valuation 171
  Ethnic composition of student bodies 175
  Negro 177
  Oriental 177
  Indian 177
  Spanish-American 177

Tables:

1. Definition of School District Size Groups 166
2. Frequency Distribution of Grade Spans 169
3. Number of Buildings Offering Grades in 1-6, 7-9, and 10-12 Spans 170
4. Place Type by Size Group 172
5. Summary Statistics for Per-Pupil Assessed Valuation for Each Size Group 175
6. Frequency Distribution for Per-Pupil Assessed Valuation Ranges–Percentage of Total Districts in Group 176
7. Percentage of Total October 1, 1968 Enrollment Reported as Negro, Oriental, Indian, Spanish-American or Other 177

Figures:

1. Percentage Distribution of Students in the Elementary and Secondary Programs, and in the Size Groups 167
2. Percentage of Students in Some Particular Programs 168
3. Per-Pupil Assessed Valuation by Size Group 173
4. Frequency Histogram for Per-Pupil Assessed Valuation–All 326 Districts 174

Appendix

Listing of School Districts 181

Section 2–Per-Pupil Expenditure Patterns 187
Introduction 187
Conclusions 187
Summary of results 188
A. Elementary, secondary and K-12 program–net per-pupil costs 188
B. Teaching and other expenditures 200
C. Expenditures by program element–indirect costs 203

Tables:

1. K-12 Program Net Per-Pupil Cost by Size Group 189
2. Frequency Distribution of School Districts Per-Pupil Expenditure by Size Classifications 191
3. Average Net Per-Pupil Cost 198
4. Adjusted Per-Pupil Costs 200
5. Per-Pupil Cost for Salaries and Other Per-Pupil Costs 202
6. Per-Pupil Expenditure by "Program Element" 205

Figures:

1. Range, Interquartile Range and Median of Net Per-Pupil Expenditure for K-12 Programs by Size Group 190
2. Cumulative Percentage of School Districts K-12 Expenditures 192
3. Frequency Histogram for K-12 Expenditures–325 School Districts 193
4. Frequency Histogram for K-12 Expenditures–116 School Districts With More Than 1,000 Pupils 194
5. Frequency Histogram for K-12 Expenditures–133 High School Districts with Fewer than 1,000 Pupils 195
6. Frequency Histogram for K-12 Expenditures–76 Nonhigh School Districts 196
7. Per-Pupil Cost of Elementary and Secondary Programs Size Group Averages 199
8. Adjusted Per-Pupil Costs of Elementary, Secondary and Teaching and Textbooks–Size Group Averages 201
9. Per-Pupil Cost–Teaching and Textbooks Versus Teachers' Salaries 203
10. Per-Pupil Expenditure by Program Element 206
11. Per-Pupil Cost of Program Elements 207

Section 3–Staffing Patterns 208
Introduction 208
Conclusions 208
Summary of Results 208
A. Percentage of total staff by type of position 208
  Principals 208
  Assistant principals 209
  Other certificated 209
  Part-time certificated 209
  Classified staff 209
  Classroom teachers 209
  Total certificated personnel 209
  Classified personnel 209

B. Staff ratios ... 214
  Student to teacher ratios ... 214
  Student to certificated staff ratios ... 214
  Student to classified staff ratios ... 227
  Student to teacher aide ratios ... 227
  Student to all staff ratios ... 227
  Teachers to other certificated staff ratios ... 227
  Other staff to teacher ratios ... 227
C. Elementary-secondary comparisons ... 227
  Student to teacher ratios ... 227
  Student to all certificated staff ratios ... 228
  Students to teacher aide ratios ... 228
  Students to all staff ratios ... 228
  Teachers to other certificated staff ratios ... 228
  All other staff to teacher ratios ... 228

Tables:

1. Percentage of Total Staff Position by Size Group ... 210
2. Teachers–Percentage of Total Staff ... 212
3. Total Certificated Personnel–Percentage of Total Staff ... 212
4. Total Classified Personnel–Percentage of Total Staff ... 213
5. Total Teacher Aides–Percentage of Total Staff ... 213
6. Student to Teacher Ratios ... 216
7. Student to Certificated Staff Ratios ... 217
8. Student to Teacher Aide Ratios ... 218
9. Student to Classified Staff Ratios ... 219
10. Student to All Staff Ratios ... 220
11. Teacher to Other Certified Staff Ratios ... 221
12. Teacher to Teacher's Aides Ratios ... 223
13. Teacher to Classified Staff Ratios ... 224
14. Other Staff to Teacher Ratios ... 225
15. Staff Ratios Elementary and Secondary Schools Size Group Averages ... 229

Figures:

1. Percentage of Total Staff by Position for Each Size Group ... 211
2. Distribution of Student to Teacher Ratios ... 215
3. Distribution of Teacher to Other Certificated Staff Ratios ... 222
4. Distribution of All Other Staff to Teacher Ratios ... 226
5. Student to Teacher Ratios–Size Group Averages ... 230
6. Teacher to Other Certificated Staff Ratios–Size Group Averages ... 231
7. All Other Staff to Teacher Ratios–Size Group Averages ... 232

Section 4–Teacher Utilization ... 233
  Introduction ... 233
  Conclusions ... 233
  Summary of Results ... 234
    A. Full-time equivalent teachers ... 234
    B. Number of preparations per teacher ... 235
    C. Pupil load per class ... 237
    D. Experience and education level of teachers ... 237

Tables:

1. Number of Teachers and Certificated Staff Size Group by Elementary, Secondary, and School District Assignments and Total Full-Time Equivalent Teachers ... 234
2. Pupil Contact Hours Per Classroom Teacher and Per School Building Certificated Staff Member ... 235

3. Number of Preparations Per Teacher Size Group by Secondary Grade Level 237
4. Teacher Load Per Class and Pupil-Teacher Ratios Size Group Averages by Grade Level 238
5. Teacher Experience–Education Weighting Factors Size Group Averages by Grade Level 239

Figures:

1. Pupil Contact Hours Per Classroom Teacher (T) and Per School Building Certificated Staff Members (S)–Size Group Averages 236
2. Teacher Experience-Education Weighting Factors Size Group Averages by Grade Level 240

Section 5–Curriculum Offering and Student Participation Patterns 241
Introduction 241
Conclusions 241
Summary of Results 242
A. Elementary schools 242
B. Secondary schools 242
C. Total subjects offered 244
D. Number of subjects by curriculum area 244
E. Percentage of students enrolled by course and subject 249
F. Student participation–subject by size group 250

Tables:

1. Percentage of Buildings Reporting Teachers With Special and Additional Subjects 243
2. Total Number of Subjects by Size Group 245
3. Number of Subjects for Grades 7-9 by Size Group 246
4. Number of Subjects for Grades 10-12 by Size Group 247
5. Total Number of Subjects Offered in at Least One School District in at Least 1 percent of the Districts 248
6. State-wide Summary of Percentage of Students Enrolled in Curriculum Areas–Junior and Senior High Schools 252
7. Percentage of Student Participation Junior High–State Summary 253
8. Percentage of Student Participation Senior High–State Summary 256
9. "Remedial" and "Gifted" Subjects 259
10. Criteria for Subjects Selected as "Common" Junior High (Grades7-9) 260
11. Criteria for Subjects Selected as "Common" High School (Grades 10-12) 263
12. Percentage of Students Enrolled in Selected Subjects Within Curriculum Area Junior High–By Size Group 268
13. Percentage of Students Enrolled in Selected Subjects Within Curriculum Area Senior High–By Size Group 269

Appendix A 271
Classifications of Subjects 273
Categories 273
Definitions 273
Academic curriculum offerings 273
Occupational curriculum offerings 273
Personal development curriculum offerings 273
Special education curriculum offerings 273
Culturally-different curriculum offerings 273
Other 273

Tables:

1. Number of Subjects in Each Elementary Course Classification 274
2. Number of Subjects in Each Secondary Course Classification 275
3. Elementary Subject Code List 276
4. Secondary Subject Code List 278

Appendix B .295
Percentage of Students Enrollment in Selected Subjects by Size Group
Tables:
1. Percentage of Students Enrolled in Selected Subjects Junior High–English Language Arts .297
2. Percentage of Students Enrolled in Selected Subjects Junior High–Social Studies .298
3. Percentage of Students Enrolled in Selected Subjects Junior High–Mathematics .299
4. Percentage of Students Enrolled in Selected Subjects Junior High–Science .300
5. Percentage of Students Enrolled in Selected Subjects Junior High–Foreign Language .301
6. Percentage of Students Enrolled in Selected Subjects Junior High–Physical and Health Education .302
7. Percentage of Students Enrolled in Selected Subjects Junior High–Music .303
8. Percentage of Students Enrolled in Selected Subjects Junior High–Arts and Crafts .304
9. Percentage of Students Enrolled in Selected Subjects Junior High–Home Economics .305
10. Percentage of Students Enrolled in Selected Subjects Junior High–Unclassified .306
11. Percentage of Students Enrolled in Selected Subjects Senior High–English Language Arts .307
12. Percentage of Students Enrolled in Selected Subjects Senior High–Social Studies .308
13. Percentage of Students Enrolled in Selected Subjects Senior High–Mathematics .309
14. Percentage of Students Enrolled in Selected Subjects Senior High–Science .310
15. Percentage of Students Enrolled in Selected Subjects Senior High–Foreign Language .311
16. Percentage of Students Enrolled in Selected Subjects Senior High–Physical and Health Education .312
17. Percentage of Students Enrolled in Selected Subjects Senior High–Music .313
18. Percentage of Students Enrolled in Selected Subjects Senior High–Arts and Crafts .314
19. Percentage of Students Enrolled in Selected Subjects Senior High–Home Economics .315
20. Percentage of Students Enrolled in Selected Subjects Senior High–Business .316
21. Percentage of Students Enrolled in Selected Subjects Senior High–Agriculture .317
22. Percentage of Students Enrolled in Selected Subjects Senior High–Unclassified .318

Section 6–Analysis of Overhead Cost Ratios .319
Introduction .319
Summary and Conclusions .319
Results .321
State averages .321
Size group comparisons .323
Location group comparisons .328

Tables:

1. State-wide Summary Statistics for Overhead Ratios 322
2. Overhead Cost Ratios by Size Group 324
3. Frequency Distribution of the Ratio of Total Cost to Teachers' Salaries r_T 325
4. Frequency Distribution of the Ratio of Total Cost to Certificated Salary r_C 326
5. Frequency Distribution of Per-Pupil Cost of (Total–Teacher Salary),f 327
6. Number of School Districts in Location Groups 328
7. Median Total Cost to Teacher Salary Ratio, r_T by Location Groups 329
8. Median Total Cost to Certificated Salary Ratio, r_C by Location Groups 329
9. Median Per-Pupil Cost of Overhead, f by Location Groups 329
10. Coefficients of Variation for r_T 330
11. Coefficients of Variation for r_C 330
12. Coefficients of Variation for f 330

1970 SCHOOL LEVY SURVEY 331

Introduction 333

Section One 333
   Who voted yes and who voted no 333
   Perceptions of the school system 333
   Was there a taxpayer's revolt? 334
   What is to be done? 334
   Summary 335

Section Two 335
   The school levy: supporters and opponents 335
   Perceptions of the school system 336
   Property taxes, previous levies, and support or opposition 337
   Reasons for support and opposition to the levy 337
   What can the district do? 338
   How should people pay for schools? 338

Appendix 339

Tables:

1. Vote by Sex 341
2. Vote by Marital Status 341
3. Vote by Age 341
4. Vote by Occupation 341
5. Vote by Home Ownership 342
6. Vote by Monthly Cost of Home 342
7. Vote by Yearly Income Level 342
8. Vote by Length of Time in School District 342
9. Vote by Education (Male) 343
10. Vote by Education (Female) 343
11. Vote by Number of Children in Family 343
12. Vote by Children of School Age 343
13. Vote by Rating of Teachers in District 344
14. Vote by Rating of Administrators in District 344
15. Vote by Rating of School Board in District 344
16. Vote by Choice of School District for Child 344
17. Vote by Rating of Teachers' Salaries in District 345
18. Vote by Rating of Administrators' Salaries in District 345

19. Vote by Availability of Information About Schools .345
20. Vote by Parental Experience as a Student .345
21. Vote by Current Property Tax Assessment .346
22. Vote by Property Tax as a Percentage of Family Income .346
23. Vote by Property Reevaluation Within the Last Year .346
24. Vote by Increase of School Taxes Within the Last Year .346
25. Vote by Support of Special Levy in Last Previous Election .347
26. Vote by Support of Special Levy in Any Previous Election .347
27. Factors Influencing Vote Decision .347
28. School Services Which Should be Cut .347
29. How People Should Pay for Schools .348
30. Criticism of the Schools by Those Who Voted "No" .348

THE EFFECT OF SIZE ON SELECTED ASPECTS OF THE EDUCATION PROCESS .349

Introduction .351

Size of Enrollment and Pupil Achievement .351

Size of Enrollment and Educational Costs .352

Size of Enrollment and Breadth of Educational Program .353

Size of Enrollment and Extracurricular Activities .354

Size of Enrollment and Professional Staff Qualifications .355

Size of Enrollment and Special Services .355

Conclusions .356

Footnotes .359

ANALYSIS OF COSTS: LARGE SCHOOL STUDY .363

Characteristics of the Urban Scene .365

The Increased Demands on Educational Institutions .365

Size and Complexity .365

Purpose of This Study .367

General Approach .367

Per-Pupil Cost Comparisons .367

Salary Considerations .368

Student-Staff Considerations .368

Adjusted Cost Comparisons .371

Survey Results .371

Discussion .373

Summary and Conclusions .376

Tables:

1. Per-Pupil Cost for Salaries 366
2. Per-Pupil Costs–Size Groups 1 and 4 367
3. Per-Pupil Cost Elements 368
4. Comparison of Per-Pupil Costs for Group 1 Districts With Group 4 Average Per-Pupil Costs 369
5. Relative Cost Adjustments–Group 1 Districts 370
6. Miscellaneous Staff and Cost Data–Group 1 Districts 374
7. Federal and Special Levy Funds 375

Appendix A 381
  Definition of school district size groups 381

Appendix B 383
  Classroom teachers' salaries–1970-71 school year 383
  Tables:
    1. Salary Information, 1969-70 School Year 384
    2. Group 1 Schools–Special Levy Information 385

Appendix C 387
  Large school survey 387
  Guidance for completion of form 389
  Extraordinary cost items–large (urban) school districts 390

IMPRESSIONS GATHERED FROM VISITING SMALL SCHOOLS 399

Introduction 401

General Approach 401

High School Districts 402
  Summary of interview data 402
    1. School management 402
    2. Organization 402
    3. Teachers 404
    4. Teacher assignment 404
    5. Teacher training 404
    6. Teacher turnover 404
    7. Teacher aides 404
    8. Librarian 404
    9. Counseling/guidance services 404
    10. Student testing 404
    11. Curriculum 404
    12. Innovation 407
    13. Remedial programs 407
    14. Summer programs 407
    15. Handicapped and special education 407
    16. Supplies and materials 407
    17. Library resources 408
    18. Food services 408
    19. Transportation 408
    20. Educational television 408
    21. Field trips 408
    22. Visiting professionals 408
    23. Extracurricular activities 408
    24. Fate of graduates 409

Impressions and Conclusions .409
  1. Course offerings .409
  2. School management .409
  3. School organization .410
  4. Financial inflexibility .410
  5. District homogeneity .410
  6. Teacher quality .410
  7. Holding power for teachers .410
  8. Supplemental resources .411
  9. Student involvement in school programs .411
  10. Field trips .411
  11. Complementary nonschool activities .412
  12. Performance of small high school graduates .412
 General recommendations .412
 Reflections on educational opportunity school performance and school size .412
 Opportunity factors .414
 Actualization factors .414

Nonhigh School Districts .418
 Summary of interview data .418
  1. Organization .418
  2. Curriculum .418
  3. Teachers .419
  4. Remedial programs .419
  5. Extracurricular programs .419
  6. Counseling and guidance .419
  7. Student testing .419
  8. Summer school .419
  9. Library resources .419
  10. Field trips .420
  11. Educational television .420
  12. Assistance from community .420
  13. Assistance from other sources .420
  14. Integration with receiving high school .420
  15. Food sources .420
  16. Transportation .420
 Impressions and conclusions .420
 General recommendations .421

Tables:

  1. Small School Interviews .403
  2. Guide for Small School Interviews .405
  3. Typical School Program Elements .415

Appendix .423
 Characteristics of school districts visited .425
  District A .425
  District B .425
  District C .425
  District D .425
  District E .425
  District F .426
  District G .426
  District H .426
 High school district data .427

GUIDELINES FOR SCHOOL DISTRICT REORGANIZATION 429

Introduction 431

Historical Background 431

The Hickey Monograph 434

The Kontos Monograph 437

Redistricting 439

Notes to Tables 3 and 4 440

Critique: School Reorganization 444

Tables:
1. Summary of Research and Opinion on Optimum School Size 435
2. Summary of Optimum Size Recommendations 436
3. Enrollment by Schools According to Weights Given Stated Characteristics Pittsburgh Great High Schools–1971 439
4. Output Using Equal Weight for All Variables 440
5. Student Information by Student Attendance Area 442
6. Present Information by Junior High School 442
7. Exchange Move Summary 443

Figures:
1. Per-Pupil Cost of Elementary and Secondary Programs–Size Group Averages State of Washington 1968 438
2. Map Printout City of Pittsburgh, Census Tract Assignments to Five School Districts 441
3. Geographic Location of Attendance Areas, Junior High Schools, and Present School District Boundaries 443
4. Proposed Solution to Case Study 444

SPECIAL EDUCATION PROGRAM IN THE STATE OF WASHINGTON 447

Review and Recommendations 449
  Goals of special education 449
  Approach used in this study 449
  Review of data collected 449
  Analysis of data collected 453
  Recommendations 461
    1. Minimum Program 461
    2. Base Program 461
    3. Ideal Program 461

Tables:
1. Categorization and Characterization of Handicapping Conditions in Washington's Special Education Program and Number of Pupils Enrolled in 1969-70 450
2. Number of Pupils Enrolled in Special Classes in 1969-70 451

3. Number of Pupils Receiving Specialized Services in 1969-70 .452
4. Pupil FTE Served and Pupil FTE on Waiting Lists in 1969-70 Special Education Program .455
5. Estimated Total Costs and Unmet Needs 1969-70 Special Education Program .456
6. Number of Full-Time Equivalent Employees and Salaries Paid 1969-70 Special Education Programs .457
7. Student-Teacher Ratios for Special Classes .458
8. The Number of Pupils in a Class by Type of Handicap .459
9. Actual Number of Handicapped Pupils on Waiting List in 1969-70 .460
10. Summary of Recommended Per-Pupil Costs by Program .461

Appendix A .465
Sources of information .465

Appendix .467
Additional information .467
Tables:
1. Estimated Twelve-Month Expenditures in Program for the Handicapped 1969-70 .468
2. Comparison of Costs by School Districts of Differing Size .469

SPECIAL EDUCATION PROGRAMS FOR INDIAN CHILDREN: RECOMMENDATIONS AND ESTIMATED COSTS .471

Introduction .473

General Approach .473

Programs Investigated .473
1. School-home liaison .474
2. Remedial programs .474
3. Early childhood education .474
4. Teacher aides .474
5. Teacher training .474
6. Enrichment of the curriculum .474
7. School counselors .475
8. Health services .475
9. Food services .475

Present Funding .476

Goals of a Model Program .476

Program Examples .476
Program 1—the model program .478
Program 2—a limited program .478
Program 3—a basic or minimum program .478

Estimate of Basic Cost .480

Estimate of State-wide Costs .485

Bibliography .491

Tables:
1. Programs Recommended Most Frequently by Resource Persons 475
2. Funding Level for Special Indian Programs in Washington State School Districts–1969-70 477
3. Components of the Three Program Examples 479
4. Average Costs of Special Educational Programs for Disadvantaged Children 480
5. Racial Distribution of Students in Washington State by Grade 486
6. Percentage Distribution of Indian Students in the Districts 487
7. Distribution of Indians by District Size 487
8. Estimated Cost for Each of the Three Program Examples 488

Figures:
1. Estimated Cost Per Indian Student For Teacher Aides as a Function of Percent Indian Enrollment 483
2. Cost Per Indian Student For Teacher Training Programs as a Function of Percent Enrollment 484

Appendix A. 495
Resource persons for Indian education programs 495

Appendix B. 497
Program cost estimates 497

SPECIAL EDUCATION PROGRAMS FOR MIGRANT CHILDREN: RECOMMENDATIONS AND ESTIMATED COSTS 499

Applicability of Programs 501

Programs Investigated 501
1. Early childhood education 502
2. Home-school liaison 502
3. Teacher training 502
4. Remedial programs 503
5. Enrichment of the curriculum 503
6. Teacher aides 503
7. Health services 503
8. Bilingual education 503
9. School counselors 503
10. Food services 503

Present Funding 504

Goals of a Model Program 504

Suggested Program Examples 504
Program 1–the model program 505
Program 2–a limited program 505
Program 3–a basic or minimum program 505

Estimate of Basic Cost 509

Estimate of State-Wide Costs 513

Bibliography 517

Tables:

1. Programs Recommended Most Frequently by Resource Persons 502
2. Components of Three Suggested Program Examples 506
3. Average Costs of Special Educational Programs for Disadvantaged Children 507
4. Ethnic Distribution of Students in Washington State by Grade 509
5. Enrollment Distribution by Ethnic Group and District Size 512
6. Ethnic Distribution in Washington State School Districts 513
7. Estimated Cost for Each of the Three Program Examples 514

Figures:

1. Cost Per Migrant Student for Teacher Aides as a Function of Percent 510
2. Cost for Teacher Training Programs Per Migrant Student as a Function of Percent Enrollment 511

Appendix A 521
Resource persons contacted on migrant education programs 521

Appendix B 523
Cost estimate breakdowns for each of the three programs identified in Table 2 523

GIFTED STUDENT PROGRAM: CURRENT STATUS AND RECOMMENDATIONS 525

Introduction 527

General Approach 527

Background of the Program 527

Funding Formula 527

Current Gifted Student Program 528

Regular Projects 528

Special Supplementary Projects 529

Discussion 529

Recommendations 530

Tables:

1. Regular Program Characteristics Gifted Student Programs 531
2. Special Supplementary Program Characteristics Gifted Student Programs 532

Appendix 535
Summary: San Francisco unified school district programs for the gifted 535

WASHINGTON STATE PUBLIC SCHOOL TEACHER AND ADMINISTRATIVE PERSONNEL SALARY SCHEDULE AND SALARY TRENDS 537

Introduction 539

Conclusions 540

Salary Schedule Highlights 540

Salary Highlights 541

Study Constraints 542

Tables:
1. 1959-1970 Analysis of Teacher Salary Schedules in Washington for Bachelor's Degree 589
2. 1959-1970 Analysis of Teacher Salary Schedules in Washington for Five Years Preparation 590
3. 1959-1970 Analysis of Teacher Salary Schedules in Washington for Master's Degree 591
4. 1959-1970 Analysis of Teacher Salary Schedules in Washington for Six Years Preparation 592
5. 1959-1970 Analysis of Teacher Salary Schedules in Washington for Highest Level Preparation 593
6. 1959-1970 Analysis of Teacher Salary Schedules in Washington by School District Size Group 594
7. 1959-1970 Analysis of Teacher Salary Schedules in Washington by Level of Preparation 595
8. Mean Amount of Increments in Salary Schedules by Teacher Preparation Level 596
9. 1969-1970 Mean and Median Schedule Salaries for Classroom Teachers, by Geographic Region Reporting Systems With Enrollment of 6,000 or More 597
10. 1969-70 Ranges of Maximum Scheduled Salaries for Central Office Administrators and Supervising Principals by Geographic Region Reporting Systems With Enrollments of 6,000 or More 598
11. 1967-1970 Salaries of Certificated Employees by School District Size Groups 599
12. Ratio of Average Salaries of Administrative and Supervisory Personnel and Classroom Teachers to Average Salary of All Classroom Teachers 603
13. 1967-1970 Enrollment and Employee Data By School District Size Group 604
14. Difference Between Average Certificated Personnel Salary Cost Per Pupil and Average Classroom Teacher Salary Cost Per Pupil 606
15. Average Salaries of Classroom Teachers Compared With Draftsmen, Nurses, and Secretaries in Seattle-Everett 1964-1965 through 1969-1970 607
16. Comparison of Seattle-Everett Area Budget Costs and Teacher Salaries 607
17. Average Starting Salaries of Classroom Teachers Compared With Those in Private Industry, 1964-65 through 1969-70 608
18. Washington State School Districts Enrolling 6,000 or More Pupils, 1968-69 609

Figures:
1. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 1 546
2. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 2 547

3. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 3 548
4. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 4 549
5. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 5 550
6. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 6 551
7. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 7 552
8. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 8 553
9. Averages of Minimums and Maximums of Scheduled Teacher Salaries for School District Size Group 9 554
10. Averages of Maximums of Scheduled Teacher Salaries by School District Size Group 555
11. Averages of Minimums and Maximums of Scheduled Teacher Salaries for Bachelor's Degree 556
12. Averages of Minimums and Maximums of Scheduled Teacher Salaries for Five Years of Preparation 557
13. Averages of Minimums and Maximums of Scheduled Teacher Salaries for Master's Degree 558
14. Averages of Minimums and Maximums of Scheduled Teacher Salaries for Six Years of Preparation 559
15. Averages of Minimums and Maximums of Scheduled Teacher Salaries for Highest Level of Preparation 560
16. Averages of Maximums of Scheduled Teacher Salaries by Level of Preparation 561
17. 1969-1970 Range Scheduled Salaries for Classroom Teachers, by Geographic Region Reporting Systems With Enrollments of 6,000 or More 562
18. 1969-1970 Range of Maximum Scheduled Salaries for Central Office Administrators by Geographic Region Reporting Systems With Enrollments of 6,000 or More 563
19. 1969-1970 Ranges of Maximum Scheduled Salaries for Supervising Principals by Geographic Region Reporting Systems With Enrollments of 6,000 or More 564
20. Washington State to United States Ratios of Average Maximums of Scheduled Teacher Salaries by Level of Preparation for Schools With Enrollment of 6,000 or More 565
21. Washington State to United States Ratios of Average Minimums of Scheduled Teacher Salaries by Level of Preparation for Schools With Enrollment of 6,000 or More 566
22. Averages of Certificated Personnel Salaries for School District Size Group 1 567
23. Averages of Certificated Personnel Salaries for School District Size Group 2 568
24. Averages of Certificated Personnel Salaries for School District Size Group 3 569
25. Averages of Certificated Personnel Salaries for School District Size Group 4 570
26. Averages of Certificated Personnel Salaries for School District Size Group 5 571
27. Averages of Certificated Personnel Salaries for School District Size Group 6 572
28. Averages of Certificated Personnel Salaries for School District Size Group 7 573
29. Averages of Certificated Personnel Salaries for School District Size Group 8 574
30. Averages of Certificated Personnel Salaries for School District Size Group 9 575
31. Averages of Certificated Personnel Salaries by Position 576
32. Averages of Superintendent Salaries by School District Size Group 577
33. Averages of Assistant Superintendent Salaries by School District Size Group 578
34. Averages of Director, Supervisor and Consultant Salaries by School District Size Group 579
35. Averages of Senior High School Principal Salaries by School District Size Group 580
36. Averages of Junior High School Principal Salaries by School District Size Group 581
37. Averages of Elementary School Principal Salaries by School District Size Group 582

38. Averages of Senior High School Teacher Salaries by School District Size Group 583
39. Averages of Junior High School Teacher Salaries by School District Size Group 584
40. Averages of Elementary School Teacher Salaries by School District Size Group 585
41. Averages of All Certificated Personnel Salaries by Schod District Size Group 586
42. Averages of All Classroom Teacher Salaries by School District Size Group 587
43. Ratio of the Average Salary of Certificated Personnel for Washington State to the Average Salary of Certificated Personnel for the United States 588

Appendix 611
Tables:
1. Washington State Geographic Regions 613
2. 1969-1970 Medians of Scheduled B.A. Teacher Salaries for Washington State Geographic Regions by School District Size Group 614
3. 1969-1970 Median of Scheduled Six-Year Teacher Salaries for Washington State Geographic Regions by School District Size Groups 615
4. 1969-1970 Median and Ranges of Maximums of Scheduled B.A. Teacher Salaries by Intermediate School District Groups 616
5. 1969-1970 Median and Ranges of Maximums of Scheduled Six-Year Teacher Salaries by Intermediate School District Groups 617
6. 1969-1970 Median and Ranges of Scheduled B.A. Teacher Salaries for Washington State Geographic Regions by School District Size Group 618
7. 1969-1970 Median and Ranges of Scheduled Six-Year Teacher Salaries for Washington State Geographic Regions by School District Size Group 619

BASIC EDUCATION

FOR WASHINGTON'S COMMON SCHOOLS

λ'

BASIC EDUCATION
FOR WASHINGTON'S COMMON SCHOOLS

Present Status

Legislative concern with providing youth a state-supported program of basic education dates back to what is popularly referred to as the "Barefoot Schoolboy Law of 1895." Originally, state-level efforts were aimed at standardizing basic education throughout the common schools. To this end, curriculum was determined at the state level and so too were texts. Examinations to insure the quality of common school education were devised at the state level and administered to students by county superintendents. Since the early 1930's, however, there has been increasing emphasis on local determination of what should be taught in the common schools and how it should be taught. In addition, the uniform state examination system has been abandoned and now testing programs are developed and implemented at the local level.

Today the state's basic education program is outlined in general at the state level and determined more explicitly by the local districts. This is not to say, however, that there are no state laws or guidelines pertinent to what constitutes the state-supported program of common school education. On the contrary, such laws and regulations do exist. They relate to: a few specific content areas in which all students must enroll; amounts of time students must spend in school; staff qualifications; ratios of students to staff; instructional resources; transportation and administration. Regulations and guidelines related to the secondary schools are considerably more explicit than those concerning the elementary schools.[1] Despite the fact that there are laws and guidelines which pertain explicitly to the state's program of basic education, it is clear that local districts now enjoy a great deal of discretion in determining for themselves the specifics of that program.

Purposes of This Study

The major purposes of this study were to:

> Examine the current status of the program of basic education–including courses of study–offered in the common schools.
>
> Solicit opinions from Washington's citizens, including professional educators, concerning what should constitute a sound state-supported program of basic education.
>
> Survey the literature pertinent to basic education programs offered in other states and consult with experts on basic education from other states.
>
> Offer recommendations concerning that program of basic education–including courses of study–which should be available in each school district and financed with state revenues.

This study was not limited to a consideration only of subject matter as it relates to a basic education program. Rather, a program of basic education has been construed to involve complex relationships among students, teachers and communities. For this reason the research and recommendations described below encompass a wide range of topics which are both directly and indirectly related to the determination of what constitutes a sound program of state-supported basic education.

Procedures

Although many techniques were employed to carry out this study, those listed below were most significant. They appear in the same order as the Purposes noted above.

---

[1] ***General Guidelines for Minimum Approval Requirements for Purposes of Apportionment*** **(Olympia: Superintendent of Public Instruction, 1969).**

Annual Secondary School Report for Standards for Accreditation of a Comprehensive Secondary School, Grades 7-12 **(Olympia: Superintendent of Public Instruction, 1969-70).**

Procedures to assess the current status of basic education in Washington.

A. The following documents were studied:
  1. Richard Widrig, et. al., *Commonality Analysis of Educational Programs in Washington's Common Schools* (Richland, Washington: Battelle Northwest, November 1970). (This document, together with a series of special studies relevant to education in Washington's common schools, was prepared by Battelle pursuant to a contract with the Temporary Special Levy Study Commission.)
  2. *An Assessment of Educational Needs for Students in Washington State* (Seattle, Washington: Consulting Services Corporation, 1969 and 1970.)
  3. *An Assessment of Educational Needs in Washington State.* (Portland, Oregon: Northwest Regional Educational Laboratory, 1966.)
  4. Gordon McCloskey, *Opinions of Local Leaders Regarding Washington's Educational Programs* (Pullman, Washington: Washington State University, July 1970.) (This research was conduted pursuant to a contract with the Temporary Special Levy Study Commission.)
  5. Numerous annual reports submitted to the Office of the State Superintendent of Public Instruction by local districts.

B. Other activities included:
  1. Twenty conferences conducted by the Commission in May of 1970 with 1,143 local leaders. (Results are described in the McCloskey report noted above.)
  2. Conferences with professional educators.
  3. Interviews with leaders from government, business, and social-cultural agencies.
  4. Visits to selected school districts.

Procedures to secure opinions from Washington's citizens, including professional educators, concerning what should constitute a sound state-supported program of basic education.

A. Printed documents included:
  1. Item A-4 above.
  2. P. Ford, *Basic Education Criteria for the Common Schools of Washington State* (Bellevue, Washington: Temporary Special Levy Study Commission, September 1970). This opinionnaire survey involved: local district and intermediate district superintendents, school board chairmen, local Washington State Federation of Teachers (WSFT) and Washington Education Association (WEA) presidents, and local Parent-Teacher Association (PTA) presidents.

B. Other activities included:
  1. Discussions with the individuals directly concerned with the state's common school program–namely, students, teachers, administrators, board members, parents, and representatives of the Office of the Superintendent of Public Instruction.
  2. Discussions with leaders from government, business and industry, and social-cultural groups.
  3. Discussions with college and university personnel both directly and indirectly concerned with the common schools.

Procedures related to literature survey and expert professional advice from other states.

A. Literature surveyed:
  1. Written descriptions of basic education programs for California, New York, Colorado, Florida, Nevada, Michigan, Texas and Massachusetts.
  2. A multitude of publications in the field of curriculum and instruction.

B. Other activities:

Discussions with experts from agencies such as the United States Office of Education, the University of Southern California at Los Angeles, the Northwest Regional Educational Laboratory, and New York University.

Major Findings

The findings which resulted from this study are voluminous. Thus only those of major consequence for Washington's program of basic education are discussed here. Further details and less significant data are contained in the appendices to this report or in sources cited below.

The current status of basic education in Washington

A. The number of courses and/or subject areas offered in Washington's middle-sized and larger districts increases every year, yet it does not appear that subject matter previously taught is dropped to make room for the new. The process is one of gradual but constant accretion. Comparisons of the numbers of courses and/or subject areas which districts offered in 1964 with those offered in 1968-69 show this increase.

The tendency toward course or subject matter proliferation is most pronounced in the secondary schools (grades 7-9 and 10-12). Further, the tendency is directly related to district size. For example, in 1968-69, high schools (grades 10-12) in districts with 20,000 or more students offered from 135 to 205 courses, while districts between 5,000 and 9,999 students offered an average of 85 subjects.[1]

There are numerous reasons for the ever-growing numbers of courses and content areas which appear in the school curriculum. For the most part, however, the schools are responding to both well-founded and ill-founded societal demands. Sex education, drug education, driver education, black studies and courses *ad infinitum* may be added to the school curriculum. This is all well and good. The point is that no priorities are set regarding what should be taught—what is of most worth. From the way the local districts now operate, it would appear that all content is of equal value. The problem is, however, that the proliferation of specialized courses or subject matter becomes costly. The cost is evident in two ways. First, additional staff must be recruited or presently employed staff must be retrained so that the specialized courses may be offered (for example, driver education and health education). Second, if previously taught subject matter is not dropped to make room for the new—especially in the elementary school curriculum—then neither will receive appropriate attention and the student will be the loser.

The school curricula increase, but the logic behind the increase is not evident. Essentially, the purpose of basic education has not been defined and so it is impossible to specify curricula relevant to that purpose.

B. There is no logical and systematic method being employed at present by any state agency to assess the total impact of the common school program on its clients. In addition, procedures employed by local districts to conduct such assessment vary widely in approach and quality.[2] The net result of this situation is that those principally responsible for supporting the basic education program, the legislature and voters, are provided little information upon which to make informed judgments about which components of the basic education are "paying off." For example, the 1969-71 biennial budget to support, with state funds, excess costs for the common schools' programs for handicapped students was approximately $43 million. The problem is that there is no way to assess the effect on learners of the dollars expended. Indeed, because of the overly simplistic "object and function" budgeting system employed in allocation of funds, it is not possible to determine, except in general, where the dollars go.[3] The point here is not to denigrate state or local effort, but rather to suggest that those who pay the bills for education are not provided adequate information upon which to make judgments related to funding.

C. In general, the curricula, as well as the instructional procedures, utilized throughout the state's elementary schools (grades 1-6) do not vary greatly.[4] There are, however, considerable differences in the number of courses offered at the secondary level. The differences are directly related to school district size. For example, in 1968-69, Seattle offered 206 different courses in grades 10-12 while Lester's high school reported only 13.[5] The following data are also significant. In 133 high school districts with 999 or fewer students, the number of courses offered in grades 10-12 ranged from ten to 59; in high school districts with 1,000 or more students, the range was from 40 to 206.[1] These findings have obvious implications for the state's commitment to provide all its youth with equal educational opportunities.

---

[1] James W. Johnston, *Commonality Analysis: Section 5* (Richland, Washington: Battelle Northwest, 1970).

[2] Richard O. Starbird, *Assessment and Accountability: Current Status and Implications for the Future of Washington State's Public Schools* (October, 1970), pp. 12-14. (This research was conducted pursuant to a contract with the Temporary Special Levy Study Commission, 1970.)

[3] R. C. Liikala, *Special Education Program in the State of Washington Review and Recommendations* (Richland, Washington: Battelle Northwest, November, 1970), p. 3 APPENDIX A, p. A-1 and TABLE A-1.)

[4] Johnston, *op. cit.*, p. 2. (Note these are 1968-69 data.)

[5] *Ibid.*, p. 9.

The future of basic education in Washington

The findings outlined below were derived from the separate studies conducted under Commission auspices by McCloskey and Ford. The findings are based on approximately 2,000 written statements submitted by representatives of: the legislature, school boards, PTA's, the business and industrial community, teachers and administrators, students, the Office of the State Superintendent of Public Instruction, colleges and universities, and the Commission.

A. In general, those principally responsible for conduct of the common school program of basic education agree that broad policy for that program should be outlined at the state level and that specific policies as well as implementation of those policies should be the responsibility of local districts.[2]

B. Every student in the state should be afforded the opportunity to complete a state-supported K-12 common school program. (Note: Kindergarten should be available to every child.)[3]

C. Washingtonians appear to be uncommitted in terms of providing compensatory education programs for urban and rural racial minority groups.[4] Rural respondents were obvious in their opposition to such programs.

D. Increased attention should be provided to programs for the handicapped[5] and gifted[6].

E. Increased counseling (especially vocational counseling) should be provided to students.[7]

F. More attention should be given to vocational-technical education.[8]

G. Community resources should be used to enhance the curricula offered within the schools.[9]

H. Instruction should be individualized.[10]

I. Free transportation should be provided any student who lives more than two miles from his school.[11]

J. The state should provide free textbooks and required instructional materials for all students.[12]

K. The community and students as well as teachers and administrators should be included in developing local school-district policies.[13]

Recommendations

The recommendations which follow are based on two overriding assumptions:

> The major goal of a state supported program of basic education in Washington's common schools is to prepare a literate, ethically responsible, physically sound and self-supporting citizenry.
>
> Every individual in the state should be offered the opportunity to complete a state supported K-12 curriculum or its equivalent. That program should be of sufficient breadth and depth, regardless of a student's social, economic or geographic circumstance, to prepare the student for admission to an institution of higher learning or for entry-level employment and/or career training.

Specific recommendations fall within categories related to: curriculum and instruction, special groups of students, student services, instructional materials, staffing, and teachers' salaries.

---

[1] *Ibid.*

[2] Ford, *op. cit.*

[3] *Ibid.*

[4] *Ibid.*

[5] McCloskey, *op. cit.*

[6] Ford, *op. cit.*

[7] McCloskey, *op. cit.*

[8] McCloskey, *op. cit.*

[9] Ford, *op. cit.*

[10] McCloskey, *op. cit.* and Ford, *op. cit.*

[11] Ford, *op. cit.*

[12] Ford, *op. cit.* (This was also a Commission decision.)

[13] Ford, *op. cit.*

Recommendations concerning curriculum and instruction

Recommendation 1

The state should support a K-12 program of basic education which is broadly specified at the state level and explicitly defined at the local level to meet local problems and potentials. The program should include areas of instruction required by the state and areas of instruction determined at the local level, but fully state supported.

A. Every school district should be responsible to the state for conducting a K-12 program of basic education which offers any student who so desires, 13 years or their equivalent of systematic and sequential instruction in the language arts, social sciences, sciences and mathematics.[1] Vocational-technical education should be provided for at least grades 7 through 12.[2] Physical education should be required in grades K-6.[3] At least one course in health education should be offered at the junior and senior high school levels.[4]

The specific subject matter or curricular sequences within content areas mentioned in Section A. should be determined at the local level. Likewise, teaching methodology and staffing patterns should be determined at the local level. The several arts should also be offered.

(Note: the language above refers to "years" and "grade levels." This language should be construed only as a guide, since school districts may wish to employ a continuous progress program which has only an indirect relationship to "years" and "grade levels." The point is that every district should do its utmost to provide those educational opportunities that will allow every student to fulfill his potential.)

B. Each district should be responsible for defining what constitutes basic education for that district – above and beyond the minimum requirements noted in Section A. Thus a district might wish to offer instruction in areas such as the arts, foreign language, home economics, ecology, or driver education. Judgments here are the responsibility of the local district.

State financial resources are not sufficient to support all of the instructional areas and activities which local districts might offer. Therefore local districts must establish priorities as to which instructional programs and activities they will request the state to support.

C. Some districts will want to offer programs and activities in addition to those which receive full state support (Sections A. and B. above). In such cases the districts will have to call upon their own resources for financial support.

State funding for the support of Sections A. and B. above may be based on a per pupil guarantee, a ratio of students to certificated personnel or any reasonable plan which assures that the integrity of Recommendation One is maintained.

The thrust of Recommendation One is to insure that all students in the common schools will be offered a program of basic education which is outlined broadly at the state level and determined specifically at the local level. This approach is designed to provide local districts with sufficient autonomy and flexibility so that local programs of basic education can be developed to meet local needs. In essence then, there is no single program of basic education proposed for all districts in the state. Rather, it is anticipated that each district's basic education program will be tailored to the needs of students within that district.

Recommendation 2

Local districts should be accountable to the state for state supported instructional programs.

A. Over a period of the next five years, each district should formulate a plan to develop performance-based objectives which pertain to students' progress in the instructional areas supported with state funds. The district could then assess its own progress in terms of the degree to which students were successful in achieving specified objectives. At the same time state officials could assess the progress of each district on an individual basis without need to compare one district with another. If each district specified the kind of performance it expected to elicit from a student, then the major point in evaluation would be whether or not the student performed at that appropriate level of competency. The comparison would be of what the district set as objectives with how well it met those objectives.

---

[1] Skills in these areas are, in general, requisite for individuals to become literate and self-supporting.

[2] Skills in this area are necessary for some individuals to become self-supporting.

[3] There is a direct and causal relationship between the early development of motor skills and skills involved in reading, writing and computation.

[4] "VD Epidemic Reported in Seattle," *Seattle Post-Intelligencer* (November 29, 1970). This article provides sufficient evidence to justify attention in the school curriculum to health education.

Recommendation 3

Kindergarten should be included in the state supported program of basic education and offered in all districts except where there is an extreme transportation hardship for students, as determined by the Superintendent of Public Instruction.

Analyses of more than 1,000 studies of selected human characteristics indicate that early childhood experiences are critical in the development of a child's psychological and physiological capabilities. Data presented in Table One below summarize the results of these analyses.

Table 1

HALF-DEVELOPMENT OF SELECTED CHARACTERISTICS AMONG HUMANS[1]

Height	Age 2½ years
General intelligence	Age 4 years
Aggressiveness in males	Age 3 years
Dependence in females	Age 4 years
Intellectuality in males and females	Age 4 years
General school achievement	Grade 3

This table should be read as follows: "General intelligence appears to develop as much from conception to age 4 as it does during the 14 years from age 5 to age 18."

The implication of this summary is that establishment of a well-planned kindergarten program is immensely important.

The need for a fully state-supported kindergarten program is generally recognized by those within this state who are principally responsible for the local operation of schools. Responses to a Commission-circulated opinionnaire (September, 1970) indicated that kindergarten ranked as a high-priority item.[2]

Recommendation 4

Instructional programs should be individualized both to improve learning and to assist students in developing a strong positive self-concept.

Researchers on the learning process, including many involved in business, industrial, military and educational organizations, have for some time recognized that different individuals may possess different learning styles. In fact, there is general agreement that different individuals learn different things in different ways and at different rates of speed. The obvious implication is that learning experiences must be structured to meet the individual learning style of each learner.

There is a large body of empirical evidence to indicate that when learning experiences are keyed to a specific student's learning style, the result for the student is success – this is especially true for the culturally and economically disadvantaged.[3] Recent studies, conducted in Washington's public schools with various types of students found in regular classrooms, indicate that at least 98 percent of the students can be successful at a 90 percent criterion level if learning situations are structured to meet individual learning styles.[1]

---

[1] Adapted from Benjamin Bloom, *Stability and Change in Human Characteristics*, New York: Wiley (1964).

[2] Ford, *op. cit.*

[3] H. L. Miller and Woock, R. R., *Social Foundations of Urban Education* (Hindsdale, Illinois: Dryden Press Inc., 1970), pp. 254ff, and N. Hickenson, *Education for Alienation* (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1966), pp. 73-80. *See also*, H. J. Prairie, *Operation Motivation: A Proposal Presented to the Directors of Pasco School District No. 1* (July 15, 1970).

The following points are critical: (1) most students will succeed if instruction is geared to their individual learning styles;[2] (2) success motivates the student to stay in the learning situation, rather than to leave it; and (3) success builds the student's self-concept.

A commitment to individualized instruction is a commitment to change in the general organizational structure *within* the state's common schools. It appears that those responsible for operation of local school districts are prepared for this change. Responses to the Commission's recently circulated opinionnaire on basic education indicated that 72 percent of the respondents strongly favored individualized instruction while only 7 percent strongly opposed it.[3]

A first step would be the actual appropriation of funds by the legislature to establish demonstration projects throughout the state to illustrate the viability of various types of individualized instructional programs. A key point here is that funds be provided so that educators might travel within the state to see the programs in action.

Recommendation 5

Community resources should be used to enhance the curricula offered within the schools. These resources should include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.

There are large numbers of highly capable individuals throughout the communities of this state who have no direct connection with education. Many such individuals are not certificated as professional educators, but this has little bearing on their effectiveness in bringing both scholarship and the relevancy of the "real world" to the school. For example, an industrial scientist might contribute much to the electronics segment of a vocational-technical education program; a bilingual housewife might prove of enormous help to Chicano children just starting school.

It must not be assumed, however, that community resources should always come to the schools. In many cases it would be far more fruitful to take the schools, in terms of *students, teachers* and *administrators,* to the resources. There is, after all, no evidence to support the notion that all learning takes place within the school. To the contrary, *there is substantial evidence to support the position that* students learn more outside the formal structure of the school than within it.[4] The world outside the school offers both intellectual and physical resources which should be utilized.

Ancillary to utilization of the community's human resources for instruction is the fact that these resources can be used as means to strengthen communication between the school and community.

In its study of those principally responsible for education at the local level, the Commission found that more than 82 percent of all respondents to a Commission opinionnaire were strongly in favor of utilizing community resources.[5] To what degree these resources are, in fact, employed remains a question.

Recommendation 6

If instructional programs are to have relevance for students, and if students are to develop a sense of responsibility for their own learning and social behavior, then they must be enlisted as partners in determining what the curriculum should be.

This proposition can be traced in the history of western civilization at least as far back as the Socratic dialogues. For many reasons, however, its influence waned and was but weakly revived in the United States as a consequence of Dewey's theories of mind and truth. Today, there are at least two consequences of the failure to include the student as a partner in determining what his education should be. First, students tend not to learn what they are told by adults they must learn. This is because students have not been involved in determining what the school curriculum should be and how instruction should take place;

---

[1] Arnold Gallegos of Washington State University and Chester Hausken of the Northwest Regional Educational Laboratory have been conducting these studies since 1967 with grants under Titles III and IV of PL 89-10.

[2] Miller and Woock, p. 254.

[3] Ford, *op. cit.*

[4] Mario Fontini and Young, M. A., *Designing Education for Tomorrow's Cities* (New York: Holt, Rinehart and Winston, Inc., 1970), pp. 61-63.

[5] Ford, *op. cit.*

unfortunately adults have made catastrophic mistakes in selecting curricula and instructional procedures.[1] The second consequence is a result of certain economic and social shifts in our society; students have been placed in a position where they can revolt against what they see as distasteful and irrelevant. Such a revolt is now in progress and it is focused on secondary as well as higher education. Today's student simply will not abide the intellectual and social authoritarianism that has characterized American education in the past.[2]

It would cost almost nothing in terms of dollars to involve students in the process of determining what should be learned and under what conditions. The only cost would be to the distended egos of some allegedly ominiscient adults.

It is recommended that school districts take immediate steps to involve students on a partnership basis with school personnel and the community in the determination of what should be learned and under what conditions. How districts organize to develop this partnership is a matter for local discussion and decision.

Recommendation 7

> The state should encourage and support research and development projects to be undertaken by local school districts. Such support should amount to one half of one percent of the total state general fund support for the K-12 program in any given year.

Progressive industries have been committed for some years to extensive research and development activities aimed at product invention and product improvement. Spurred by the success of such industrial efforts, the U.S. Office of Education began design of major plans for educational research and development in the late 1950's. During the 1960's the Congress enacted landmark legislation to encourage such research and development. Title IV of Public Law 89-10 (and As Amended) is an excellent example of Congressional intent; that law set aside tens of millions of dollars for the establishment of a network of regional educational laboratories whose function it was to conduct research and development activities. The law also provided for grants to individual researchers. The problem, however, was that almost none of the federal monies found their way into local school districts. For the most part, the monies went to college and university researchers or to the regional educational laboratories.

The intent of Recommendation 7 is to provide funds, on a project-proposal basis, to local school districts for conducting research and development related to local needs and potentials. It is hoped that once state support is phased out, the local districts would continue those activities which had proved fruitful.

Recommendations concerning special groups of students

Recommendation 8

> All practicable steps should be taken to provide enlarged and enriched programs for disadvantaged minorities in the state's urban areas.

Based on responses to the Commission's opinionnaire on basic education, it is clear that large numbers of individuals throughout the state who are responsible for education at the local level either are not aware of the problems of disadvantaged urban minorities or they are not willing to do anything about these problems.[3]

Despite this conclusion, it is imperative that affected districts be encouraged to continue development of programs which are specifically appropriate to local needs.[4] Although there have been questions about the viability of certain programs to aid urban disadvantaged children,[1] there is substantial evidence to suggest that these children can achieve extremely high levels of competence provided they are given the appropriate types of personalized instruction.[2] Thus the state should provide a weighting factor of 0.2 for these students in the present state apportionment formula. In addition, special funds should be set aside by the state to be awarded, on a project-proposal basis, to districts undertaking to serve the needs of urban disadvantaged students.

---

[1] Oscar Handlin, *The Uprooted* (New York: Grosset, 1956), pp. 173-180.

[2] Charles E. Silberman, "Murder in the Classroom," *The Atlantic Monthly* (June, July, August 1970), and M. D. Fantini and Young, M. A., *Designing Education for Tomorrow's Cities* (New York: Holt, Rinehart and Winston, 1970), Chapters 1 and 3.

[3] Ford, *op. cit.*

[4] Elinor McCloskey, *Urban Disadvantaged Pupils* (Portland, Oregon: Northwest Regional Educational Laboratory, 1967).

Recommendation 9

All practicable steps should be taken to provide enlarged and enriched programs for disadvantaged minorities in the state's rural areas.

Responses to the Commission's opinionnaire on basic education make it clear that large numbers of individuals throughout the state who are responsible for education at the local level are at best apathetic about the difficulties faced by rural minorities. Ironically, respondents from large districts are more concerned about these difficulties than are those from small districts; many board directors from small districts tend to be oblivious to the problem.[3]

While there are not large numbers of disadvantaged minority groups in the state's rural areas, there are sufficient numbers with learning problems to demand attention. (For example, in 1968-69, approximately 3,000 of the state's 9,669 Indian students were enrolled in districts with a total enrollment of 1,000 or less.[4] In that same year, the number of migrant Mexican-American students in the state's schools varied from 7,000 to 14,000. Most of these students were in rural schools.[5])

The poverty cycle into which disadvantaged rural minorities are locked has been well known to sociologists for some time. Yet the cycle continues either to perpetuate itself in rural areas or to spin off individuals from the rural areas into a new, but nonetheless equally disasterous poverty cycle in our urban areas. For this reason, it is recommended that: (1) a weighting factor of at least 0.2 be provided for these students in the present state apportionment formula; (2) special funds be set aside by the state to be awarded, on a project-proposal basis, to districts undertaking to serve the needs of rural disadvantaged students; and (3) the Office of the State Superintendent of Public Instruction be allocated special funds to work with local districts in the development, implementation and evaluation of a logical and systematic program for rural disadvantaged students.

Recommendation 10

The legislature should authorize an immediate study by an impartial agency to assess the efficiency and effectiveness of the state's program for educating the handicapped in the common schools. (This does not pertain to the handicapped who are institutionalized.)

As noted earlier in this document, the 1969-71 biennial state expenditure to support excess costs of the handicapped program was approximately $43 million. The State Superintendent of Public Instruction requested an additional $16 million for 1971-73. Despite the high level of expenditures for this program, information regarding the return on these expenditures and proposed expenditures is sparse at best.[6] Indeed, *program reporting* from local districts on the expenditure of state funds is vague and not of much use in determining what, in fact, goes on in programs for the handicapped, let alone how effective and efficient they are. An immediate and thorough investigation of this program is imperative.

---

[1] Gordon P. Liddle, *et. al.*, *Educational Improvement in an Elementary Setting* (Springfield, Ill.: Charles C. Thomas, 1967), p. 77.

[2] Miller and Woock, p. 254; Prairie, pp. 22-23.

[3] Ford, *op. cit.*

[4] R. J. Brouns, *Special Education Programs for Indian Children: Recommendations and Estimated Costs* (Richland, Washington: Battelle Northwest, November 1970), p. 22.

[5] R. J. Brouns, *Special Education Programs for Migrant Children: Recommendations and Estimated Costs* (Richland, Washington: Battelle Northwest, November 1970), p. 30.

[6] R. C. Liikala, p. 3.

Recommendation 11

Programs for the gifted should be expanded throughout the state in a logical and systematic fashion.

The gifted are a resource of immense value to the prosperity of this state. It is just as important for these young people to develop their fullest potential as it is for disadvantaged groups to realize theirs, yet only a minute portion of the state's education budget (approximately $525,000 in 1969-71) is now allocated to programs for the gifted.

It is recommended that districts be encouraged to develop, implement and evaluate enlarged programs for the gifted and that the present biennial allocation for the gifted be increased to $2 million. Funds should be provided to districts on the basis of specific projects proposed by the districts to the Office of the State Superintendent of Public Instruction.

Recommendation 12

Vocational education should be emphasized in the common schools. The maximum vocational weighting factor per student should be 1.0. But this maximum should be employed only after a school district's vocational program has been carefully reviewed and approved by the State Superintendent of Public Instruction.

In implementing this recommendation, the Office of the Superintendent of Public Instruction should consider at least the following two criteria: (1) the quality of the proposed vocational program; and (2) in cases of middle-sized and small districts, the districts' willingness to work cooperatively to develop jointly sponsored programs. The object of the latter is to discourage wasteful duplication of facilities and to encourage the effective and efficient development of shared vocational education programs and facilities.

Recommendation 13

The legislature should establish a temporary body empowered to: (1) study *each* small high school district and nonhigh school district in the state; (2) designate which of these is remote and necessary; (3) reorganize those districts not designated as remote and necessary; and (4) recommend increased amounts of support for districts which are designated as necessary.

As noted in the Findings section of this report, small nonhigh school and high school districts do not offer anywhere near the variety of courses offered in districts with 1,000 or more students.[1] The efficiency of such districts has also been questioned throughout the literature.[2] In addition, board chairmen and superintendents from small rural districts included in the Commission's opinionnaire survey were extremely conservative in their views on common school education. The following points taken from the opinionnaire are cogent with regard to board chairmen and their attitudes toward curriculum and instruction:[3]

A. In general they do not see kindergarten as being valuable.

B. They are consistently and heavily opposed to specialized instruction and/or noninstructional programs and services for *rural disadvantaged minorities.*

C. They favor a curriculum offering only the so-called "essential courses."

D. They are opposed to subject matter that would acquaint students with the heritage, values and life-style of culturally different groups.

E. They oppose innovative programs and organizational patterns for the schools.

---

[1] *See also*, Johnston, *Commonality Analysis: Section 5*, p. 12.

[2] George Kontos, *What Education Research Says About the Effect of Size on Selected Aspects of the Education Process* (Richland, Washington: Battelle Northwest, November 1970).

[3] Ford, *op. cit.*

The characteristics of small high school districts in the state have received the attention of numerous researchers. Their findings, based on interviews with students and study of student records, indicate that small districts to not take advantage of their smallness to individualize instruction, that students in these schools tend to be bored because of the lack of stimulating subject matter, and that some of the highest dropout rates in the state occur in rural areas.[1]

Based on the evidence at hand, it appears fruitless to continue to support all small school districts as if all were necessary. It would be more appropriate to increase the support level for small districts which are necessary and to reorganize those which cannot be justified as separate entities.

Recommendations concerning student services

Recommendation 14

The state should pay 100 percent of approved transportation costs for all students who must travel two miles or more to school.

Recommendation 15

There should be at least one full-time certificated counselor for each 300 elementary school students and one for each 400 secondary school students.

It is generally accepted that high schools and junior high schools should employ counselors[2] The logic for this position is that students require assistance in making judgments about academic, personal and vocational alternatives–especially during the high school years. Unfortunately, educators have not realized until rather recently that the most formative years in a child's school life are his early years in school. It is during these years that patterns for success or failure are developed. This point has been well documented by Bloom and his associates;[3] it is especially relevant to children who come from educationally and culturally disadvantaged environments.[4] Thus, the intent of this recommendation is to provide impetus for the continued and increased use of fully qualified junior and senior high school counselors, but more important, the immediate deployment of fully qualified elementary school counselors.

Recommendation related to instructional materials

Recommendation 16

The state should provide textbooks and instructional materials for all public school students in required courses.

Practices related to providing students with free texts and instructional materials required for participation in courses taught in the state's common schools vary to some degree throughout the state. The intent of this recommendation is to assure that no student will be penalized because he cannot afford to purchase texts or instructional materials for required courses. This recommendation in no way implies a policy of state textbook adoption. To the contrary, selection of textbooks is a prerogative of local school districts.

---

[1] Paul Ford, "Small High Schools; Myth, Reality, Potential," *The Bulletin of the National Association of Secondary School Principals 51*: 317, 89-95, March 1967.

See also, P. Ford, H. Hite and N. Koch, *Education in Small High Schools* (Portland, Oregon: Northwest Regional Educational Laboratory, 1967).

[2] James B. Conant, *The Comprehensive High School* (New York: McGraw-Hill, 1967), p. 25.

[3] Benjamin Bloom, *Stability and Change in Human Characteristics* (New York: John Wiley and Sons, Inc., 1964).

[4] Mario Fantini and Weinstein, G., *The Disadvantaged* (New York: Harper and Row, 1968), and Mario Fantini and Weinstein, G., *Making Urban Schools Work* (New York: Holt, Rinehart and Winston, Inc., 1968).

Recommendation related to staffing

Recommendation 17

Each district should be free to determine and employ those staffing patterns which appear to be most appropriate to the local situation.

Recommendation related to teacher salaries

Recommendation 18

The state apportionment for salaries should be determined by placing each district's personnel on a statewide salary schedule which should be determined by the legislature at each of its sessions.

This salary schedule, established by the state, should include steps for education and experience. Implementation of this recommendation would help eliminate special levies. Further, it would put an end to the excessive hours of salary negotiations now spent at the local level.

APPENDICES

Appendix A

BASIC EDUCATION CRITERIA

FOR THE COMMON SCHOOLS OF THE STATE OF WASHINGTON

Part One:	Summary
Part Two:	Responses of All Respondents to Opinionnaire
Part Three:	Responses of Board Chairmen to Opinionnaire
Part Four:	Responses of WSFT Presidents to Opinionnaire
Part Five:	Responses of WEA Presidents to Opinionnaire
Part Six:	Responses of Superintendents and Intermediate School District Superintendents to Opinionnaire
Part Seven:	Responses to PTA Presidents to Opinionnaire

Part One

SUMMARY

This report summarizes responses to the Commission's opinionnaire: *Basic Education Criteria for the Common Schools of the State of Washington* (September, 1970).

Purpose of the opinionnaire

The opinionnaire was designed to help the Commission ascertain what various groups of individuals, principally responsible for education at the local level in Washington, saw as the most important criteria in establishing a state supported program of basic education. (The opinionnaire is attached.)

The opinionnaire was also developed to serve as a means for validating results from a series of 20 regional conferences conducted by the Commission throughout the state in May 1970. (A report of the May conferences, *Opinions of Local Leaders Regarding Washington's Educational Programs* [July 30, 1970], is attached.)

Sample and return

A total sampling technique was employed. Opinionnaires were sent to all district and intermediate district superintendents or head teachers, district board chairmen, presidents of local teacher unions, local WEA unit presidents, and PTA Council presidents. Of 933 opinionnaires mailed early in September of 1970, 555 or 54 percent were returned in time for analysis.

Table 1

NUMBER OF OPINIONNAIRES SENT AND RETURNED

Group	Number Mailed	Number Returned	Percentage Returned
Intermediate superintendents	14	14	100.0
Superintendents or head teachers	319	198	62.1
School board chairmen	319	124	38.9
WSFT presidents	21	7	33.3
WEA presidents	196	111	56.6
PTA presidents	64	29	45.3
Unknown		22	
Total	933	505	

Tabulation of district-by-district responses indicated that 80 percent of the districts in the state were represented in the total returns. The majority of those districts from which *no* completed opinionnaire was returned were category 9 districts – the smallest in the state. Table 2 shows the number of districts, by size, from which no response was received.

Notes on the interpretation of this report:

1. "Small" districts are alluded to frequently within the report. A small district is one which falls within size groups 6-9 in Table 2 below. Analysis of the responses from all districts indicates that there is a "break" between size group 5 and 6 in the way respondents rate the criteria presented. In other words, groups 6-9 tend to vote the same way. The reason for the "break" at this point is not clear.
2. An immense amount of data (190 tables) was generated from the returned opinionnaires.[1] Only the highlights of data analyses are presented here. The internal format of this report is: the criterion is stated; then highlights of resonses pertinent to that criterion are noted; finally, a tabulation of combined rankings givn the criterion by all groups is given. Thus the interpretation of the statistics regarding the criterion on kindergartens (p. 1) would be: 16.4 percent of the total response to the criterion is negative; 18.2 percent is mixed; 65.4 percent favor kindergartens.
3. When totaled, most of the percentages reported for most of the criteria do not equal 100 percent. This is because many respondents did not rank every criterion.

---

[1] The tables follow as Parts Two through Seven.

Table 2

DISTRICTS FROM WHICH NO RESPONSE WAS RECEIVED

(By size, using the Battelle classification)

Size Group	Enrollment Range	No. of Districts In Range	No. Not Responding
1	Greater than 20,000	6	0
2	10,000-19,999	9	0
3	5,000-9,999	20	1
4	2,600-4,999	30	0
5	1,600-2,599	25	5
6	1,000-1,599	28	2
7	500-999	60	6
8	200-499	65	9
9	Less than 200	78	41

Criteria related to students

Criterion 1
A state-supported kindergarten program should be available to every child in the state.

The majority of respondents assigned this criterion a high priority. This position was consistent within and among the various groups polled except that the smaller the school district the more apt directors (36) and superintendents (18) were not to favor kindergartens.

The evidence here suggests that there is substantial support for a kindergarten program.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
6.2	10.2	18.2	23.8	41.6

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

A very large proportion of respondents assigned this criterion a high priority.

Respondents' Ranking of Criterion
(percent)

Absolutely "No"				Absolutely "Yes"
.6	1.2	4.8	13.7	79.7

Criterion 3
Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:

A. Racial minority, urban

Opinion on this criterion was divided, but the following observations are pertinent. The larger a school district, the more likely respondents from the district were to assign the criterion high priority. The smaller the school district, the more likely respondents from the district were to assign the criterion low priority. This trend was particularly characteristic of board members from small school districts.

The data indicate, in general, that those principally concerned with the schools' operation either are not aware of the difficulties of urban minorities or that they are not willing to do anything about these problems.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
12.0	17.4	31.9	18.8	14.3

B. Racial minority, rural

The rankings of this criterion were rather evenly distributed as is shown in the figures below. The data do show that large district superintendents, WEA members and union members rank this criterion higher than do small district superintendents and WEA members. Small district superintendents are split on the issue. Small district board members rank this criterion low.

It appears that those respondents from rural areas are either less likely to recognize problems faced by rural minorities or that they are not willing to do anything about them.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
12.6	17.6	32.9	19.5	11.8

C. Handicapped

All respondents assigned this criterion a high priority. There is consistency of opinion both within and among all groups.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
1.0	2.7	15.5	29.0	49.1

D. Gifted

In general all groups either tended to rank this criterion high or to have mixed reactions to it. There was, however, a clearly discernable trend among small school superintendents (36) to assign the criterion a low ranking.

It is interesting that a relatively large proportion of the respondents ranked this criterion high, yet only a minute part of the state's education budget is earmarked for the gifted.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
8.3	12.4	31.7	22.8	19.3

Note: Ten respondents noted that there should be vocational education programs for those not college bound. Four respondents mentioned the need for special programs for the poor.

Criterion 4
Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

This criterion received high ranking within and among all groups *except directors of small school districts.*

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
3.1	5.4	22.8	30.2	37.5

Criteria related to curriculum

Criterion 1
Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.

As will be noted in the figures given below, opinions about this criterion were divided. It is clear, however, that representatives of the WEA, regardless of district size, ranked the criterion very low. That is, this group is not satisfied with offering students only a state-supported program of essential courses and activities. WEA representatives listed a variety of courses which should be offered. These courses may be categorized in the following program areas: the arts, vocational education and home economics, physical education and health, human relations and ecology.

Superintendents were split on this issue, although there was a tendency among those in larger districts to assign the criterion a low priority. These groups mentioned the need for the same types of programs listed above in regard to WEA responses to the criterion. Superintendents of small schools tended to rate the criterion high.

School directors, by a margin of two to one, ranked the criterion high. School district size was not a significant factor in the directors' responses.

A most obvious question appears as a consequence of data analysis: why should school directors as a group support a limited basic education program?

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
24.3	17.0	18.2	16.2	19.9

Criterion 2
All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

Respondents in general ranked this criterion high. Approximately 90 percent of those who assigned the criterion low priority were respondents from the small school districts – especially school directors.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
6.0	10.6	31.5	29.0	22.2

Criterion 3

All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

As is shown below the majority of respondents either assigned this item a relatively high priority or they expressed mixed feelings. As with Criterion 2 above, respondents from small schools rate this criterion lower than do their counterparts in larger school districts. It is true, however, that the *total* number of small school respondents who assigned the criterion a high priority is slightly more than that of those who ranked it low.

While it has been argued in the literature that youth in rural areas are given a variety of opportunities to become self-reliant, the responses to Criteria 2 and 3 do not indicate that those responsible for the schools are willing to give youth these opportunities.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
4.1	12.2	33.7	30.6	18.4

Criterion 4

The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

More than 51 percent of the respondents ranked this criterion relatively high. Rankings of the criterion were directly related to school district size; the larger the district, the more likely respondents were to rank the criterion high. Directors of small schools, as a group, ranked this criterion low.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
3.5	12.4	32.5	32.5	18.8

Criterion 5

Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

Almost all respondents within all groups ranked this item high.

It would be useful to have data describing the numbers and types of school districts throughout the state which utilize community resources.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
.6	2.5	13.9	40.6	42.6

Criterion 6
Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

There was general agreement among most respondents that this item should be given high priority. Interestingly, almost every respondent who ranked this item low was from a small school district.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
2.5	4.8	19.9	28.0	44.1

Criterion 7
School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

For the most part respondents accorded this criterion a high ranking. The exception was among small district directors, 32 of whom ranked the criterion low. Several (27) small district superintendents also ranked the criterion low.

The major reason expressed by small district directors and superintendents for their low ranking of this criterion was that their staffs were too small to mount innovative programs. The implication here is that some agency or agencies should be responsible for aiding small districts.

It would seem appropriate in light of the figures noted below that some consideration be given to a planned program of state-supported educational innovation.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
6.4	14.9	24.6	29.6	23.4

Criteria related to services

Criterion 1
All school districts should offer guidance and counseling services of equally high quality. If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

In general this criterion was ranked high by all respondents. Low rankings were evenly distributed within and among the various groups of respondents.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
1.9	6.4	22.3	33.3	35.8

Criterion 2
All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

This criterion was given reasonably high ranking by all groups of respondents. Low rankings occurred for the most part among respondents from small school districts.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
3.1	11.8	24.2	33.5	26.5

Criterion 3
All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

Approximately 50 percent of the respondents ranked this item high. Those who ranked the item low were evenly distributed within and among respondent groups.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
5.8	17.8	25.3	25.6	24.6

Criterion 4
Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

Most respondents ranked this criterion high.

All but three superintendents who responded to this item ranked it as high priority. Low rankings were distributed evenly within and among groups of respondents. It was suggested by some respondents that distance from school not be the only criteria for free transportation. Of equal importance, for example, might be a child's safety from violence.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
3.3	8.1	16.4	23.2	47.6

Criteria related to instructional resources

Criterion 1
The state should provide free textbooks for all students.

Most respondents ranked this criterion high. This was true within and among groups. Some (3) respondents who rated this criterion low did so because they thought implementation of the criterion would lead to a state-adoption policy regarding textbook selection. Others (4) who ranked the criterion low said that students should learn to become self-reliant – one way would be to earn their own money for purchase of books.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
6.0	8.9	18.0	22.3	43.9

Criterion 2
The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

This criterion was rated low both within and among the groups of respondents.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
33.7	28.1	19.5	7.9	10.4

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

Generally all respondents either ranked this item high or they expressed no strong feeling. Interestingly, directors of small schools ranked the item high, while small school superintendents tended to be divided in their opinions. The reason for inconsistency is not clear.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
8.9	16.1	25.1	22.6	25.5

Criteria related to finance and administration

Criterion 1
State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

Reactions to this issue tended to be polarized with relatively few respondents taking a middle ground.

The directors of the larger school districts were split on this issue. Sixteen ranked the criterion low; 14 ranked it high. Small school directors consistently ranked the criterion low.

The larger school district superintendents, including those in classification 6, ranked this criterion high. Small district superintendents are clearly divided on the issue with almost equal numbers ranking it high and low.

WEA representatives ranked the criterion high as did the few union representatives who responded. PTA rankings were evenly distributed.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
20.3	14.7	14.9	20.7	23.6

Criterion 2
The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

Fifty-six percent of the respondents ranked this criterion high. The majority of superintendents in all sizes of school districts agreed that this criterion should be ranked high. School directors in large districts also ranked the criterion high, while those from small school districts were split.

Union respondents were split with equal numbers ranking the item high priority and low priority. WEA representatives were also divided on this issue; those from larger districts tended to rank the criterion low; those in the smaller districts ranked the criterion high.

Responses from PTA's followed no trend.

A number of respondents remarked that the language of the criterion should be changed to delete the word "minimum."

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
19.0	11.8	11.8	19.4	36.6

Criterion 3
Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

This criterion received relatively low ranking. The most obvious trend in the responses was that large and small district superintendents, board members, WEA and union representatives were opposed to the criterion.

It should be noted, however, that a considerable number of small school directors, superintendents and WEA representatives did rank the criterion high. PTA responses were widely distributed.

The major implication of the grouped data regarding this criterion is probably that local districts, themselves, want to determine and control broad programs offered at the district level.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
24.4	24.4	20.5	15.3	14.7

Criterion 4
Broad programs to be offered in the schools should be determined at the local level.

The majority of respondents ranked this criterion high. Responses were consistant within and among groups.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
12.0	12.2	14.7	27.9	31.4

Criterion 5
Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

This criterion was given low ranking by all groups. There were, however, a considerable number of school directors (34) representing small- and middle-sized districts who ranked the criterion high.

The evidence here strongly suggests that, in general, respondents do not favor letting the state control what courses and course content should be offered at the local level.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
37.9	23.6	18.0	11.4	8.1

Criterion 6
Specific courses and course content to be offered in the schools should be determined at the local level.

This criterion was posed to find out if respondents favored local control of specific courses and course content. The data indicate that with few exceptions respondents placed a high priority on local control. Some small district superintendents (15) and small district board members (14) did not favor local control.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
6.2	6.4	16.1	28.4	41.6

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

Respondents ranked this criterion very high. This evidence suggests that local districts would identify their own specific educational needs above and beyond state requirements. Thus each district would offer a program geared to its own identified needs.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
4.4	3.7	14.1	31.1	46.2

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

In general this criterion received high ranking from all groups. At the same time, some small school district board members (16) and some small school district superintendents (23) ranked the criterion low. From written statements submitted by these two small school groups, it is apparent that they anticipate more "paperwork" if uniform budgeting systems are introduced. Several (5) of the small districts who rated the criterion low said that they would have ranked the criterion high if it contained provisions for accountant help.

The evidence here clearly indicates that this state's common schools should move toward uniform budgeting systems.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
3.7	8.5	24.2	31.5	29.6

Criterion 9
Each district's schools should be utilized on a 12-month basis.

The only group which consistently ranked this criterion high was the WEA. The other groups' rankings were divided and no clear patterns of response were obvious.

This evidence leads to the conclusion that those chiefly responsible for the schools' operation are not aware of the benefits that might accrue from the schools' year-round utilization.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
16.8	14.3	26.9	21.5	18.4

Criterion 10
The community and students as well as teachers and administrators should be included in developing local school district policies.

Respondents both within and among groups rank this criterion high. Some small district school directors (12) and superintendents (13) rank this criterion low.

In light of the evidence gathered here, it is apparent that most respondents see a four-way partnership, among the community, students, teachers and administrators, as important to developing school district policies. Evidence to support the idea that this partnership actually exists is scant.

Respondents' Ranking of Criterion
(Percent)

Absolutely "No"				Absolutely "Yes"
4.5	4.7	19.1	34.8	35.6

Attachment

OPINIONNAIRE: BASIC EDUCATION CRITERIA FOR THE COMMON SCHOOLS OF THE STATE OF WASHINGTON

School District Name and Number ______________________________

Explanation: Each of the criteria listed below has been suggested as pertinent to what should constitute a sound program of state supported basic education. The criteria have been drawn from oral and written statements submitted by representatives of: the legislature, school boards, PTA's, the business and industrial community, teachers and administrators, the Office of the Superintendent of Public Instruction, colleges and universities, the Commission and its staff. You will note some conflicts among the criteria. These are the natural result of differences in values held within and among the groups which have submitted criteria.

Please rank each of the criteria listed below in terms of the priority *you* would assign it in relation to a sound program of state-supported basic education. As you proceed in your ranking, remember that state funds are limited, therefore you *must* set priorities among the criteria. To indicate your ranking, check the appropriate space at the right of each of the criteria.

> Note: Space is provided at the end of the opinionnaire for listing and ranking additional criteria which you may want to include. The Commission would also appreciate any other comments you wish to offer.

PLEASE RETURN THIS OPINIONNAIRE IN THE ENCLOSED ENVELOPE BY SEPTEMBER 18, 1970.

Criteria Related to Students	Lowest Priority (Absolutely) "No" 1	2	3	4	Highest Priority (Absolutely) "Yes" 5
Criterion 1 A state-supported kindergarten program should be available to every child in the state.					
Criterion 2 Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.					
Criterion 3 Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:					
Racial minority, urban					
Racial minority, rural					
Handicapped					
Gifted					
Other, please specify ______________					
Criterion 4 Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)					

Criteria Related to Curriculum	Lowest Priority (Absolutely) "No" 1	2	3	4	Highest Priority (Absolutely) "Yes" 5
Criterion 1					
Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.					
Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state-supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.					
Criterion 2					
All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)					
Criterion 3					
All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)					
Criterion 4					
The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)					
Criterion 5					
Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)					
Criterion 6					
Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)					

Lowest Priority (Absolutely) "No" — Highest Priority (Absolutely) "Yes"

1 2 3 4 5

Criterion 7

School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

______ ______ ______ ______ ______

Criteria Related to Services

Criterion 1

All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

______ ______ ______ ______ ______

Criterion 2

All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

______ ______ ______ ______ ______

Criterion 3

All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

______ ______ ______ ______ ______

Criterion 4

Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

______ ______ ______ ______ ______

Criteria Related to Instructional Resources

Criterion 1

The state should provide free textbooks for all students.

______ ______ ______ ______ ______

Criterion 2

The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

______ ______ ______ ______ ______

Criterion 3

The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

______ ______ ______ ______ ______

Criteria Related to Finance and Administration	Lowest Priority (Absolutely) "No" 1	2	3	4	Highest Priority (Absolutely) "Yes" 5
Criterion 1 State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1000 students.)					
Criterion 2 The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)					
Criterion 3 Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)					
Criterion 4 Broad programs to be offered in the schools should be determined at the local level.					
Criterion 5 Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)					
Criterion 6 Specific courses and course content to be offered in the schools should be determined at the local level.					
Criterion 7 Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.					
Criterion 8 Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.					
Criterion 9 Each district's schools should be utilized on a 12-month basis.					
Criterion 10 The community and students as well as teachers and administrators should be included in developing local school district policies.					
Additional Criteria					
Comments:					

Part Two
RESPONSES OF ALL RESPONDENTS TO OPINIONNAIRE

Instructions for Interpretation

The tables in Part Two present the total responses of the five groups who participated in the basic education criteria survey.

The tables should be interpreted as follows:

1. The criterion is stated.
2. The respondent group is listed by code number in the extreme left column of each table so that
   "1" represents school board chairmen;
   "2" represents Washington State Federation of Teachers local presidents;
   "3" represents Washington Education Association local presidents;
   "4" represents local district and intermediate district superintendents;
   "5" represents PTA local council presidents.
3. There are five horizontal rankings opposite each respondent group. The rankings move from negative priority at the extreme left to positive priority at the extreme right. The number within each ranking represents the total number of respondents who assigned the criterion listed in this specific ranking. Thus, the first table should be read:
   > "Of all board chairmen responding, group 1, 19 ranked kindergarten as lowest priority, while 33 assigned it highest priority."
4. The two horizontal sets of figures at the very bottom of each table show the total rankings assigned the criterion in terms of numbers of votes cast and percentage of total votes cast. Thus the first table should be read:
   > "Of all respondents ranking Criterion 1, 201 or 41.6 percent assigned it highest priority, while 30 or 6.2 percent assigned it lowest priority."

Criteria Related to Students

Criterion 1

A state-supported kindergarten program should be available to every child in the state.

Respondent	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
	1	2	3	4	5
1	19	22	32	18	33
2	2	0	0	3	2
3	1	7	25	37	41
4	8	14	28	53	109
5	0	6	3	4	16
Total	30	49	88	115	201
	6.2 %	10.2 %	18.2 %	23.8 %	41.6 %

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	3	2	8	12	99
2	0	0	1	1	5
3	0	1	8	19	83
4	0	2	5	32	173
5	0	1	1	2	25
	3	6	23	66	385
	.6%	1.2%	4.8%	13.1%	79.7%

Criterion 3
Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:

Racial minority, urban

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	28	23	41	18	5
2	0	0	2	3	2
3	5	21	33	22	23
4	22	35	71	44	30
5	3	5	7	4	8
	58	84	154	91	68
	12.0%	17.4%	31.9%	18.8%	14.3%

Racial minority, rural

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	29	24	41	17	4
2	0	0	3	3	1
3	7	22	33	24	18
4	22	35	73	45	28
5	3	4	9	5	6
	61	85	159	94	57
	12.6%	17.6%	32.9%	19.5%	11.8%

Handicapped

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	4	2	23	31	62
2	0	1	1	2	3
3	1	6	16	39	44
4	0	3	30	61	112
5	0	1	5	7	16
	5	13	75	140	237
	1.0%	2.7%	15.5%	29.0%	49.1%

Gifted

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	14	14	41	28	19
2	1	0	2	3	1
3	3	13	40	31	16
4	18	30	63	43	49
5	4	3	7	5	8
	40	60	153	110	93
	8.3%	12.4%	31.7%	22.8%	19.3%

Other, please specify

Criterion 4
Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	9	9	30	44	30
2	0	2	2	1	2
3	1	6	27	30	47
4	3	7	42	69	88
5	2	2	9	2	14
	15	26	110	146	181
	3.1%	5.4%	22.8%	30.2%	37.5%

Criteria Related to Curriculum

Criterion 1
Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.
Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	15	19	23	25	35
2	1	0	4	1	1
3	39	26	19	10	10
4	52	32	35	41	44
5	10	5	7	1	6
	117	82	88	78	96
	24.3%	17.0%	18.2%	16.2%	19.9%

Criterion 2
All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	17	19	40	27	19
2	0	0	2	1	4
3	3	10	37	33	28
4	5	20	63	72	50
5	4	2	10	7	6
	29	51	152	140	107
	6.0%	10.6%	31.5%	29.0%	22.2%

Criterion 3
All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	9	13	48	37	16
2	0	1	0	3	3
3	0	14	34	38	24
4	8	26	74	63	39
5	3	5	7	7	7
	20	59	163	148	89
	4.1%	12.2%	33.7%	30.6%	18.4%

Criterion 4
The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	8	31	43	31	10
2	0	0	1	3	3
3	1	11	36	36	28
4	6	15	68	77	45
5	2	3	9	10	5
	17	60	157	157	91
	3.5%	12.4%	32.5%	32.5%	18.8%

Criterion 5
Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	7	20	49	46
2	0	0	1	2	4
3	0	1	10	52	48
4	1	3	30	85	93
5	0	1	6	8	14
	3	12	67	196	205
	.6%	2.5%	13.9%	40.6%	42.4%

Criterion 6
Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	8	12	33	30	38
2	0	0	1	2	4
3	1	1	21	30	58
4	3	10	35	65	99
5	0	0	6	8	14
	12	23	96	135	213
	2.5%	4.8%	19.9%	28.0%	44.1%

Criterion 7
School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	14	24	38	27	20
2	0	2	0	1	4
3	2	15	20	38	35
4	12	26	53	71	48
5	3	5	8	6	6
	31	72	119	143	113
	6.4%	14.9%	24.6%	29.6%	23.4%

Criteria Related to Services

Criterion 1
All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	7	8	33	39	37
2	0	1	1	4	1
3	1	7	27	40	36
4	0	11	46	72	83
5	1	4	1	6	16
	9	31	108	161	173
	1.9%	6.4%	22.3%	33.3%	35.8%

Criterion 2
All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	8	16	34	39	26
2	0	1	1	2	3
3	4	13	22	40	31
4	2	22	59	75	53
5	1	5	1	6	15
	15	57	117	162	128
	3.1%	11.8%	24.2%	33.5%	26.5%

Criterion 3
All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	13	20	37	24	27
2	0	1	2	2	2
3	6	20	23	31	31
4	8	40	55	62	47
5	1	5	5	5	12
	28	86	122	124	119
	5.8%	17.8%	25.3%	25.6%	24.6%

Criterion 4
Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	7	7	15	26	66
2	0	2	2	1	2
3	4	19	25	26	37
4	4	8	29	52	115
5	1	3	8	7	10
	16	39	79	112	230
	3.3%	8.1%	16.4%	23.2%	47.6%

Criteria Related to Instructional Resources

Criterion 1
The state should provide free textbooks for all students.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	9	10	17	26	59
2	1	0	2	3	1
3	11	14	27	23	36
4	8	16	36	50	101
5	0	3	5	6	15
	29	43	87	108	212
	6%	8.9%	18.0%	22.3%	43.9%

Criterion 2
The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	47	35	12	10	19
2	1	4	0	2	0
3	45	31	22	8	5
4	53	63	53	18	25
5	17	3	7	0	1
	163	136	94	38	50
	33.7%	28.1%	19.5%	7.9%	10.4%

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	12	20	28	23	38
2	0	1	0	4	2
3	7	17	26	32	28
4	21	35	61	46	45
5	3	5	6	4	10
	43	78	121	109	123
	8.9%	16.1%	25.1%	22.6%	25.5%

Criteria Related to Finance and Administration

Criterion 1
State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	41	20	16	21	18
2	0	1	2	2	2
3	11	13	21	23	35
4	38	33	31	47	56
5	8	4	2	7	3
	98	71	72	100	114
	20.3%	14.7%	14.9%	20.7%	23.6%

Criterion 2
The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	37	9	8	26	42
2	0	3	1	0	3
3	28	18	18	13	32
4	21	24	25	49	93
5	6	3	5	6	7
	92	57	57	94	177
	19.0%	11.8%	11.8%	19.4%	36.6%

Criterion 3
Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	38	26	24	17	19
2	0	2	0	2	3
3	26	33	25	16	11
4	49	52	43	34	32
5	5	5	7	5	6
	118	118	99	74	71
	24.4%	24.4%	20.5%	15.3%	14.7%

Criterion 4
Broad programs to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	15	16	18	29	44
2	2	1	3	1	0
3	11	9	22	35	33
4	23	32	24	65	64
5	7	1	4	5	11
	58	59	71	135	152
	12.0%	12.2%	14.7%	27.9%	31.4%

Criterion 5
Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	35	30	24	21	13
2	2	2	1	0	2
3	48	29	17	14	3
4	86	49	41	17	16
5	12	4	4	3	5
	183	114	87	55	39
	37.9%	23.6%	18.0%	11.4%	8.1%

Criterion 6
Specific courses and course content to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	10	10	29	33	40
2	2	0	1	2	2
3	5	7	16	33	50
4	9	13	32	63	93
5	4	1	0	6	16
	30	31	78	137	201
	6.2%	6.4%	16.1%	28.4%	41.6%

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	5	9	18	30	60
2	0	1	1	3	2
3	4	3	18	35	50
4	10	5	28	75	94
5	2	0	3	7	17
	21	18	68	150	223
	4.4%	3.7%	14.1%	31.1%	46.2%

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	6	11	24	43	36
2	0	0	3	2	2
3	3	5	30	33	35
4	9	22	56	70	53
5	0	3	4	4	17
	18	41	117	152	143
	3.7%	8.5%	24.2%	31.5%	29.6%

Criterion 9
Each district's schools should be utilized on a 12-month basis.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	33	14	26	29	18
2	0	2	2	0	2
3	9	14	32	30	23
4	36	37	64	41	32
5	3	2	6	4	14
	81	69	130	104	89
	16.8%	14.3%	26.9%	21.5%	18.4%

Criterion 10
The community and students as well as teachers and administrators should be included in developing local school district policies.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	9	7	31	36	38
2	0	0	1	4	2
3	3	5	22	34	47
4	8	10	35	85	71
5	2	1	3	9	14
	22	23	92	168	172
	4.5%	4.7%	19.1%	34.8%	35.6%

Part Three

RESPONSES OF BOARD CHAIRMEN TO OPINIONNAIRE

Instructions for Interpretation

The tables in Part Three present responses of *school board chairmen*, by school district size, to each criterion in the basic education criteria survey.

The table should be interpreted as follows:

(1) The criterion is stated.

(2) The school district size (by student enrollment) from which each group of respondents came is listed by code number in the extreme left column of each table so that

"1" represents enrollment greater than 20,000
"2" represents districts between 10,000 and 19,999
"3" represents districts between 5,000 and 9,999
"4" represents districts between 2,600 and 4,999
"5" represents districts between 1,600 and 2,599
"6" represents districts between 1,000 and 1,599
"7" represents districts between 500 and 999
"8" represents districts between 200 and 499
"9" represents districts with less than 200 enrollment

(3) There are five horizontal rankings opposite each respondent group. The rankings move from negative priority at the extreme left to positive priority at the extreme right. The number within each ranking represents the total number of respondents, by district size, who assigned the criterion listed this specific ranking. Thus the first table should be read:

> "Of all board chairmen representing school district size 4 who responded, none assigned kindergarten lowest priority, while 5 assigned it highest priority."

(4) The last set of horizontal figures at the bottom of each table represents the total number of votes cast by respondents at each ranking level. Thus the first table should be read:

> "Of all board chairmen ranking Criterion 1, 19 ranked it as lowest priority, while 33 assigned it highest priority."

Note: Parts Four through Seven should be interpreted in the same manner as that described above for Part Three.

Criteria Related to Students

Criterion 1

A state-supported kindergarten program should be available to every child in the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	2	0
2			1		
3	1	1	1	4	4
4		2	5	3	5
5	1		2	1	6
6	2	2	3	3	2
7	5	3	8		7
8	6	10	7	2	4
9	4	4	5	3	5
	19	22	32	18	33

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2			1		
3		1		1	9
4		1		1	13
5				1	9
6				2	10
7	1		4		18
8	2		2	6	19
9			1	1	19
	3	2	8	12	99

Criterion 3
Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:
Racial minority, urban

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	1
2			1		
3	1		5	4	1
4	2	2	8	1	1
5		2	3	3	1
6	5	2	4	1	
7	6	5	3	6	
8	7	8	11	1	
9	7	4	6	1	1
	28	23	41	18	5

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
Racial minority, rural					
1	0	0	0	1	1
2			1		
3	1		6	4	
4	3	3	6	1	1
5		2	3	3	1
6	5	2	4	1	
7	6	5	3	6	
8	7	8	11	1	
9	7	4	7		1
	29	24	41	17	4
Handicapped					
1	0	0	0	1	1
2				1	
3			4	2	5
4	2		4	5	4
5	1				9
6			1	3	8
7	1	1	4	5	12
8			6	9	13
9		1	4	5	10
	4	2	23	31	62
Gifted					
1	0	0	0	2	0
2				1	
3	2		3	4	1
4	1	2	6	4	2
5			3	4	2
6		4	3	1	4
7	3	2	6	5	5
8	7	3	11	5	2
9	1	3	9	2	3
	14	14	41	28	19

Other, please specify

1	Not bound for college
2	Vocational
3	Poor (Less than $4,000)

Criterion 4
Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	1
2					1
3			4	5	2
4	1		4	7	3
5			2	3	5
6	1	1	2	5	2
7	1	4	4	9	5
8	4	3	6	9	7
9	2	1	8	5	4
	9	9	30	44	30

Criteria Related to Curriculum

Criterion 1
Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.
Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.

Driver Training Drama Industrial Arts Home Economics Art
Music Health Vocational Physical Education

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	0	0
2				1	
3	3	1	3	2	2
4	3	4	1	4	2
5	2	2		2	4
6	1	3	2	3	2
7	2	1	5	4	9
8	4	6	4	4	9
9		2	6	5	7
	15	19	23	25	35

Criterion 2
All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2			1		
3	1	3	3	1	3
4		4	4	5	1
5		1	6	1	2
6	2		5	3	1
7	5	4	7	4	3
8	5	3	9	10	2
9	4	4	5	3	5
	17	19	40	27	19

Criterion 3
All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	2	0
2			1		
3		1	7	2	1
4	1	2	4	6	2
5		1	6	3	
6	1	2	6	3	
7	3	1	12	5	2
8	2	3	7	13	4
9	2	3	5	3	7
	9	13	48	37	16

Criterion 4
The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	1
2			1		
3		3	3	4	1
4		2	4	6	2
5		1	5	4	
6	1	2	5	4	
7	2	8	6	3	4
8	4	8	10	6	1
9	1	7	9	3	1
	8	31	43	31	10

Criterion 5
Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	1
2					1
3			2	4	5
4	1			10	4
5		1	1	3	5
6		1	4	6	1
7	1	3	3	7	9
8		1	6	10	12
9		1	4	8	8
	2	7	20	49	46

Criterion 6
Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2				1	
3			3	3	5
4		1	5	3	6
5	1	1	2	2	4
6			4	6	2
7	2	5	6	4	6
8	4	3	8	5	7
9	1	2	5	6	6
	8	12	33	30	38

Criterion 7
School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	1
2				1	
3	2		3	5	1
4		2	8	2	3
5	1	1	3	4	1
6	2	3	3	3	1
7	2	7	5	4	5
8	5	9	8	4	3
9	2	2	8	3	5
	14	24	38	27	20

Criteria Related to Services

Criterion 1

All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	1
2			1		
3		1	3	4	3
4	1	1	3	4	6
5		1	2	2	5
6	1	1	5	2	3
7	2		8	5	8
8		2	8	14	5
9	3	1	3	8	6
	7	8	33	39	37

Criterion 2

All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	1
2			1		
3	1	2	4	3	1
4		2	5	7	1
5		2	2	4	2
6	1	1	4	3	3
7	2	2	9	3	7
8	1	2	7	14	5
9	3	4	2	5	6
	8	16	34	39	26

Criterion 3

All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	1
2			1		
3		3	4	2	2
4	2	1	7	3	1
5		2	4	2	2
6	1	2	3	3	2
7	4	2	8	1	8
8	3	6	7	9	4
9	3	3	3	4	7
	13	20	37	24	27

Criterion 4

Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	1
2				1	
3		1	2	1	7
4	1	2	3	3	6
5	1	1	2	3	3
6			3	2	6
7		2	1	2	18
8	4		3	8	13
9	1	1	1	5	12
	7	7	15	26	66

Criteria Related to Instructional Resources

Criterion 1
The state should provide free textbooks for all students.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	1	0
2		1			
3	1	2		2	5
4	1	1	5	4	4
5		1	1	3	5
6		1	2	3	5
7	1	1	3	3	15
8	4	3	3	7	12
9	1		3	3	13
	9	10	17	26	59

Criterion 2
The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	1	0
2	1				
3	4	2	3		2
4	3	8	1	1	2
5	2	4		2	2
6	5	2	1	3	1
7	6	9		2	6
8	17	6	4		2
9	8	4	3	1	4
	47	35	12	10	19

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	1
2		1			
3	2	2	3	1	3
4	1	7	3	1	3
5		2	2	3	3
6		1	3	2	5
7	1	1	6	4	10
8	4	2	7	10	6
9	4	3	4	2	7
	12	20	28	23	38

Criteria Related to Finance and Administration

Criterion 1
State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	0	1
2		1			
3	2	2	6		
4	4	2	1	6	2
5	2	2	1	2	3
6	4		1	4	2
7	8	4		5	4
8	12	6	4	3	3
9	8	3	3	1	3
	41	20	16	21	18

Criterion 2
The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	1	0
2	1				
3	3	2		2	4
4	3		1	2	9
5	1			5	4
6			1	6	5
7	7		1	2	12
8	14	6	1	2	5
9	8	1	3	6	3
	37	9	8	26	42

Criterion 3
Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	0	1
2		1			
3	4	4	1	1	2
4	4	2	5	4	
5	3	3	1	1	2
6	2		3	3	3
7	7	7	3	2	4
8	10	5	8	2	4
9	7	4	3	4	3
	38	26	24	17	19

Criterion 4
Broad programs to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	0	1
2				1	
3		1	1	6	4
4	1	5	3	2	4
5	1			6	3
6	3	2	3		3
7	3	3	3	4	9
8	5	2	5	6	11
9	2	3	2	4	9
	15	16	18	29	44

Criterion 5
Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	0	0	0	0
2		1			
3	4	3	3	2	
4	3	5	4	3	
5	5	3		2	
6	1	3	2	4	1
7	8	3	4	3	4
8	7	10	6	3	3
9	5	2	5	4	5
	35	30	24	21	13

Criterion 6
Specific course and course content to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2				1	
3	1		2	3	5
4	1	4	4	3	3
5				6	4
6	1		4	3	3
7	2	3	4	6	7
8	3	1	10	6	9
9	2	2	5	5	7
	10	10	29	33	40

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2			1		
3	1			4	6
4	1	2	2	7	3
5	1	1	1	2	5
6		1	2	3	6
7	2	2	5	2	12
8		3	3	8	14
9			4	4	12
	5	9	18	30	60

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2					1
3			1	5	5
4	1		3	5	5
5			1	3	6
6				9	3
7	2	2	5	5	8
8	3	4	10	8	3
9		5	4	8	3
	6	11	24	43	36

Criterion 9
Each district's schools should be utilized on a 12-month basis.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	1	0	0
2					1
3		1	3	6	1
4	1	1	2	7	4
5	2	2	3	3	
6	3	1	3	3	2
7	6	2	8	4	3
8	11	4	4	4	5
9	9	3	2	2	2
	33	14	26	29	18

Criterion 10

The community and students as well as teachers and administrators should be included in developing local school district policies.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	2
2					1
3		1	1	4	5
4	2		5	5	3
5		1	5	2	2
6			3	4	4
7	2	2	6	4	9
8	2	2	7	12	5
9	3	1	4	5	7
	9	7	31	36	38

Additional Criteria

1. Correct timing on county tax funds to local districts.
2. State legislature should be made flexible enough for each two years' seniors to relate to one-year school budgeting.
3. County apportionment ratio should be held to actual 25 or 50 percent tax evaluation; should not devalue to the current 16.91 percent.
4. Federal funding and staffing. If districts commit to staffing and programming application – make it mandatory that Federal funding cannot be cut after a certain date.
5. Have only *one* group responsible for state accreditation.
6. Review bus condition; out-of-district vs. local carriers. Kids cannot afford the tariff out of this district.
7. Review Teachers vs. Board negotiating law. Amend to be more explicit as to procedures, etc. Boards are tiring of all the time involved. Are *all* things really negotiable?
8. Review contract automatic teacher renewal condition. Institute state-wide basic achievement tests.
9. Improve vocational training program.
10. Develop adult education program.

Part Four

RESPONSES OF WSFT PRESIDENTS TO OPINIONNAIRE

Criteria Related to Students

Criterion 1
A state-supported kindergarten program should be available to every child in the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	1	1
2	0	0	0	2	1
3	1	0	0	0	0
4					
5					
6					
7					
8					
9					
	2	0	0	3	2

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	0	2
2				1	2
3					1
4					
5					
6					
7					
8					
9					
	0	0	1	1	5

Criterion 3
Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
Racial minority, urban					
1	0	0	2	0	1
2				2	1
3				1	
4					
5					
6					
7					
8					
9					
	0	0	2	3	2
Racial minority, rural					
1	0	0	3	0	0
2				2	1
3				1	
4					
5					
6					
7					
8					
9					
	0	0	3	3	1
Handicapped					
1	0	1	1	0	1
2				2	1
3					1
4					
5					
6					
7					
8					
9					
	0	1	1	2	3

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
Gifted					
1	1	0	1	1	0
2				2	1
3			1		
4					
5					
6					
7					
8					
9					
	1	0	2	3	1
Other, please specify:					
1. Underprivileged					1

Criterion 4
Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	2	1	0	0
2			1	1	1
3					1
4					
5					
6					
7					
8					
9					
	0	2	2	1	2

Criteria Related to Curriculum

Criterion 1

Full state support should be provided *only* for the *essential* course and activities required to prepare a student for immediate employment, career training and/or higher education.

Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.

Art
Music
Literature
Social Studies

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	0	1
2	1		2		
3			1		
4					
5					
6					
7					
8					
9					
	1	0	4	1	1

Criterion 2

All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	1	0
2					3
3					1
4					
5					
6					
7					
8					
9					
	0	0	2	1	4

Criterion 3
All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	1	1
2				2	1
3					1
4					
5					
6					
7					
8					
9					
	0	1	0	3	3

Criterion 4
The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	2	0
2				1	2
3					1
4					
5					
6					
7					
8					
9					
	0	0	1	3	3

Criterion 5
Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	1	1
2				1	2
3					1
4					
5					
6					
7					
8					
9					
	0	0	1	2	4

Criterion 6
Since different students learn different things in different ways and at different rates of speed instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	0	2
2				2	1
3					1
4					
5					
6					
7					
8					
9					
	0	0	1	2	4

Criterion 7
School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	2	0	0	1
2				1	2
3					1
4					
5					
6					
7					
8					
9					
	0	2	0	1	4

Criteria Related to Services

Criterion 1
All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	2	0
2			1	1	1
3				1	
4					
5					
6					
7					
8					
9					
	0	1	1	4	1

Criterion 2
All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	1	1
2			1	1	1
3					1
4					
5					
6					
7					
8					
9					
	0	1	1	2	3

Criterion 3
All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	1	1	0
2			1	1	1
3					1
4					
5					
6					
7					
8					
9					
	0	1	2	2	2

Criterion 4
Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	2	0	1	0
2			2		1
3					1
4					
5					
6					
7					
8					
9					
	0	2	2	1	2

Criteria Related to Instructional Resources

Criterion 1
The state should provide free textbooks for all students.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	1	0	1
2			1	2	
3				1	
4					
5					
6					
7					
8					
9					
	1	0	2	3	1

Criterion 2
The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	2	0	0	0
2	0	2	0	1	0
3	0	0	0	1	0
4					
5					
6					
7					
8					
9					
	1	4	0	2	0

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	2	1
2		1		2	
3					1
4					
5					
6					
7					
8					
9					
	0	1	0	4	2

Criteria Related to Finance and Administration

Criterion 1

State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	0	1
2		1		2	
3					1
4					
5					
6					
7					
8					
9					
	0	1	2	2	2

Criterion 2

The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	0	2
2		3			
3					1
4					
5					
6					
7					
8					
9					
	0	3	1	0	3

Criterion 3
Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	2
2		1		2	
3					1
4					
5					
6					
7					
8					
9					
	0	2	0	2	3

Criterion 4
Broad programs to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	2	0	0
2		1	1	1	
3	1				
4					
5					
6					
7					
8					
9					
	2	1	3	1	0

Criterion 5

Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	1	0	1
2	2	1			
3					1
4					
5					
6					
7					
8					
9					
	2	2	1	0	2

Criterion 6

Specific course and course content to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	1	0	1
2				2	1
3	1				
4					
5					
6					
7					
8					
9					
	2	0	1	2	2

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	3	0
2			1		2
3		1			
4					
5					
6					
7					
8					
9					
	0	1	1	3	2

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	1	1
2			2	1	
3					1
4					
5					
6					
7					
8					
9					
	0	0	3	2	2

Criterion 9
Each district's schools should be utilized on a 12-month basis.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	1	0	1
2		1	1		1
3					
4					
5					
6					
7					
8					
9					
	0	2	2	0	2

Criterion 10
The community and students as well as teachers and administrators should be included in developing local school district policies.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	3	0
2			1		2
3				1	
4					
5					
6					
7					
8					
9					
	0	0	1	4	2

Additional Criteria
1. Clearly distinguish between classroom and administrative costs.
2. School should be open 12 months (students attend three out of four quarters.)

Part Five

RESPONSES OF WEA PRESIDENTS TO OPINIONNAIRE

Criteria Related to Students

Criterion 1
A state-supported kindergarten program should be available to every child in the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	3	3
2			2	1	
3		2	1	6	3
4			2	6	9
5		1		6	6
6		1	3	2	6
7		2	10	8	8
8		1	7	4	4
9	1			1	2
	1	7	25	37	41

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	5
2					3
3			2	2	8
4		1	2	1	13
5			1	2	10
6				4	8
7			3	5	20
8				3	13
9				1	3
	0	1	8	19	83

Criterion 3
Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
Racial minority, urban					
1	0	0	0	0	5
2		1	2		
3		3	2	3	4
4	1	2	5	2	6
5		1	6	4	1
6	1	2	5	3	1
7		10	9	3	3
8	1	3	5	4	2
9	2		1	1	
	5	21	33	22	23
Racial minority, rural					
1	0	0	0	0	5
2		1		2	
3		3	2	4	3
4	1	3	5	3	4
5		1	7	4	
6	1	4	3	3	1
7	1	7	11	4	2
8	2	3	4	4	2
9	2		1		1
	7	22	33	24	18
Handicapped					
1	0	0	0	0	5
2				2	1
3		2	2	4	4
4			2	4	10
5			1	8	3
6	1		2	3	6
7		1	4	13	9
8		2	5	3	5
9		1		2	1
	1	6	16	39	44

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
Gifted					
1	0	0	1	0	4
2				2	1
3		4	3	3	2
4		2	6	5	2
5		1	8	3	
6	1		3	6	1
7	2	3	10	9	2
8		2	8	3	2
9		1	1		2
	3	13	40	31	16

Other, please specify

1. Vocational
2. Poor

Criterion 4
Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	0	4
2			1		2
3		1	4	2	5
4			3	9	5
5			1	2	10
6			3	4	5
7		3	7	9	9
8	1	2	5	3	5
9			1	1	2
	1	6	27	30	47

Criteria Related to Curriculum

Criterion 1

Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.

Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.

Music
Art
Home Economics
Shop
Counseling
Vocational
Physical Education
Foreign Languages
Civics
Drama
Speech
Social Studies
Human Relations
Humanities
Ecology
Health
English

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	1	0	1	0
2	1		2		
3	5		3	1	2
4	6	4	4	1	1
5	4	7	1		
6	2	3	2	3	2
7	12	7	3	2	2
8	6	4	3		3
9	1		1	2	
	39	26	19	10	10

Criterion 2

All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	3	1
2			1	2	
3		1	3	6	2
4		2	7	2	6
5		1	6	2	4
6		1	3	5	3
7	2	3	7	10	6
8		2	6	2	6
9	1		2	1	
	3	10	37	33	28

Criterion 3

All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	4	1
2		1		1	1
3		2	3	6	1
4		2	5	5	4
5		1	6	2	4
6		3	3	5	1
7		3	8	8	9
8		1	7	5	3
9		1	1	2	
	0	14	34	38	24

Criterion 4

The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	0	6
2		1		2	
3			3	6	3
4		3	5	5	4
5		2	4	3	4
6		1	6	2	3
7		1	11	11	5
8	1	2	5	5	3
9		1	1	2	
	1	11	36	36	28

Criterion 5

Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	1	4
2				2	1
3			2	4	6
4			2	8	7
5				7	6
6			3	6	3
7			1	14	13
8			2	8	6
9				2	2
	0	1	10	52	48

Criterion 6

Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	0	4
2			1		2
3			1	4	7
4			3	5	9
5				3	10
6			2	2	8
7			8	11	9
8	1	1	3	4	7
9			1	1	2
	1	1	21	30	58

Criterion 7
School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	1	2	2
2					3
3		1	3	2	6
4		3	4	5	5
5		2	1	5	4
6		1	2	4	5
7	1	4	4	13	6
8	1	3	4	5	3
9			1	2	1
	2	15	20	38	35

Criteria Related to Services

Criterion 1
All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	2	2
2			1		2
3			4	6	2
4		3	5	4	5
5		1	2	2	8
6			2	5	5
7			10	10	8
8	1	2	1	8	4
9		1		3	
	1	7	27	40	36

Criterion 2

All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	3	2
2			1	2	
3		3	3	4	2
4	1	3	2	9	2
5			4	4	5
6	1	2	1	3	4
7	1	3	5	7	12
8	1	2	4	6	3
9			1	2	1
	4	13	22	40	31

Criterion 3

All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	2	3
2				2	1
3		1	7	3	1
4		5	3	6	3
5	2	3	1	3	4
6		4	2	2	4
7	1	4	7	5	11
8	2	2	3	6	3
9	1			2	1
	6	20	23	31	31

Criterion 4
Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	2	3
2	1	1			1
3	1	1	2	4	4
4		5	6	3	3
5		3	1	4	5
6		1	5	3	3
7		3	5	5	15
8	1	4	6	3	2
9	1			2	1
	4	19	25	26	37

Criteria Related to Instructional Resources

Criterion 1
The state should provide free textbooks for all students.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	2	3
2		1	1		1
3	2		4	2	4
4	2	2	5	3	5
5	1	3	2	2	5
6		1	2	2	7
7	3	3	9	6	7
8	1	3	3	5	4
9	2	1		1	
	11	14	27	23	36

Criterion 2
The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	1	3	0	1
2	2	1			
3	4	2	6		
4	8	6	2	1	
5	5	5	1	1	1
6	2	3	3	3	1
7	14	9	3	2	
8	7	2	4	1	2
9	2	2			
	45	31	22	8	5

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	2	1	2
2		2			1
3	1	3		4	3
4	1		8	6	2
5		2	3	5	3
6		1	3	3	5
7	3	4	3	10	8
8	2	2	5	3	4
9		2	2		
	7	17	26	32	28

Criteria Related to Finance and Administration

Criterion 1

State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	2
2		1	1	1	
3	2	1	3	2	4
4	2		2	3	7
5	1	1	3	4	4
6	1	1	2	2	5
7	3	3	6	7	9
8		5	4	2	4
9	2	1		1	
	11	13	21	23	35

Criterion 2

The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	1	1	1	0
2	1	1			1
3	4	2	3	2	1
4	3		3	3	8
5	6	3	4		
6	5	2		1	4
7	3	5	4	2	13
8	3	3	2	4	4
9	1	1	1		1
	28	18	18	13	32

Criterion 3

Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	2	1	1	0
2	2	1			
3	2	8		2	
4	5	4	6		2
5	3	3	4	2	1
6	1	3	2	2	4
7	7	9	7	3	2
8	3	2	4	5	2
9	1	1	1	1	
	26	33	25	16	11

Criterion 4

Broad programs to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	2	3
2					3
3	1		2	5	4
4	2	1	3	6	5
5		2	1	6	4
6	2	1	5	1	3
7	3	1	8	9	7
8	3	3	1	5	3
9		1	1	1	1
	11	9	22	35	33

Criterion 5
Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	3	1	1	1	0
2	2	1			
3	6	5		1	
4	6	6	1	3	1
5	8	3	2		
6	2	4	2	3	1
7	13	6	7	2	
8	7	2	3	3	1
9	1	1	1	1	
	48	29	17	14	3

Criterion 6
Specific courses and course content to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	1	4
2					3
3			3	3	6
4	2		2	8	5
5			3	3	7
6	1	2	2	3	4
7	1	2	2	12	11
8	1	2	3	2	8
9		1		1	2
	5	7	16	33	50

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	0	4
2			1		2
3			4	3	5
4	2	1	2	7	5
5			1	4	8
6		2	3	3	4
7	1		3	10	14
8			4	6	6
9				2	2
	4	3	18	35	50

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	2	2
2				1	2
3			3	3	5
4			6	4	7
5	1		3	6	3
6			3	6	3
7	1	2	10	5	9
8	1	3	3	5	2
9			1	1	2
	3	5	30	33	35

Criterion 9

Each district's schools should be utilized on a 12-month basis.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	3	3	0
2				2	1
3	1	1	1	4	4
4		2	6	2	7
5	3	1	5	3	
6			5	5	2
7	3	6	6	8	5
8	2	3	4	2	4
9		1	2	1	
	9	14	32	30	23

Criterion 10

The community and students as well as teachers and administrators should be included in developing local school district policies.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	2	2	2
2					3
3		1	1	6	4
4	1	1	3	3	9
5	1		1	4	7
6		1	2	4	5
7		1	9	8	10
8	1		3	6	6
9		1	1	1	1
	3	5	22	34	47

Additional Criteria

1. Improve staff-education ratio.
2. Improve staff weighting characteristics.
3. Implement state-wide purchase of *all* materials and equipment.

Part Six

RESPONSES OF SUPERINTENDENTS AND INTERMEDIATE DISTRICT SUPERINTENDENTS* TO OPINIONNAIRE

Criteria Related to Students

Criterion 1
A state-supported kindergarten program should be available to every child in the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	2	1	4	8
1				1	4
2				2	6
3				4	10
4	1		3	3	18
5				6	5
6	1		3	7	10
7	1	3	9	12	19
8	3	7	10	7	20
9	1	2	2	7	9
	8	14	28	53	109

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0		1	2	13
1				1	4
2				2	6
3			2	1	11
4					25
5				2	9
6				2	19
7		1		8	35
8			2	11	34
9		1		3	17
	0	2	5	32	173

---

*Responses include some members of intermediate district staffs in addition to intermediate district superintendents.

Criterion 3

Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:

Racial minority, urban

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0		2	6	3	4
1			1	2	2
2		1	1	2	2
3	1	3	2	5	2
4	5	6	4	8	2
5		2	5	2	1
6	1	3	14	1	1
7	3	6	20	13	2
8	11	6	14	4	10
9	1	6	4	4	4
	22	35	71	44	30

Racial minority, rural

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0		2	6	3	4
1			2	2	1
2		1	1	2	2
3	1	3	2	6	1
4	5	6	5	7	2
5		2	5	2	1
6	1	4	14	1	1
7	3	6	20	12	2
8	11	6	14	5	10
9	1	5	4	5	4
	22	35	73	45	28

Handicapped

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0			1	4	10
1			1	2	2
2				3	3
3			1	7	6
4			5	3	17
5				4	7
6			5	4	11
7		1	6	12	25
8			8	15	23
9		2	3	7	8
	0	3	30	61	112

Gifted

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0			5	3	6
1		1	2	1	1
2		1	2	3	
3		3	6	2	3
4	5	2	11	3	4
5			4	3	3
6	3	2	10	3	3
7	5	6	11	13	8
8	4	9	11	8	13
9	1	6	1	4	8
	18	30	63	43	49

Other, please specify

Migrant					1
Adults		1		1	
Economic Minority					1

Criterion 4

Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0			1	6	9
1					5
2			1	3	4
3			1	3	10
4	2	1	5	9	8
5			1	6	4
6	1		4	6	9
7		1	15	14	14
8		4	10	14	18
9		1	4	8	7
	3	7	42	69	88

Criteria Related to Curriculum

Criterion 1

Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.

Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.

Vocational
Humanities
Music, Art
Ecology
Physical Education
Social Studies
Health, Home Economics
Debate, Drama
Industrial arts

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	4	3	2	4	2
1	3	1			1
2	6	1			1
3	5	2		2	4
4	7	5	6	3	4
5	3	1	5	1	1
6	4	7	1	4	4
7	8	5	8	7	14
8	8	6	6	15	10
9	4	1	7	5	3
	52	32	35	41	44

Criterion 2

All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0		1	1	9	5
1				3	2
2		1	2	2	3
3			4	4	5
4	2	3	7	10	3
5			4	2	5
6		1	10	5	5
7	1	5	16	13	8
8	1	7	14	15	10
9	1	2	5	9	4
	5	20	63	72	50

Criterion 3

All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	0	4	6	5
1			1	4	
2			2	3	3
3		2	2	6	4
4	2	4	9	8	2
5			4	5	2
6		2	11	4	4
7	2	7	19	8	6
8	2	9	16	11	9
9	1	2	6	8	4
	8	26	74	63	39

Criterion 4
The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	1	4	6	5
1				2	3
2			2	3	3
3			2	6	6
4	2	1	7	12	3
5			5	5	1
6		2	9	7	3
7	1	2	17	15	8
8	3	7	16	15	6
9		2	6	6	7
	6	15	68	77	45

Criterion 5
Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	0	0	7	9
1				4	1
2				1	7
3			2	4	8
4			2	10	13
5			2	4	5
6		1	3	9	8
7			5	21	18
8	1		10	19	17
9		2	6	6	7
	1	3	30	85	93

Criterion 6
Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	0	1	6	9
1					5
2					8
3				7	7
4			5	9	11
5		1	1	3	6
6	1	2	3	3	12
7		1	13	14	16
8	1	4	10	16	16
9	1	2	2	7	9
	3	10	35	65	99

Criterion 7
School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	1	3	6	6
1			1	2	2
2		1		3	4
3		1	4	3	5
4	2	4	7	8	4
5	1	1	3	5	1
6	1	3	9	4	3
7	5	4	10	16	9
8	2	9	10	18	8
9	1	2	6	6	6
	12	26	53	71	48

Note: Small schools do not have enough staff to develop innovative programs.

Criteria Related to Services

Criterion 1
All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	0	1	8	7
1		1		1	3
2			1	3	4
3		1	3	6	4
4		2	4	11	8
5			2	6	3
6			6	6	9
7		2	10	12	20
8		2	15	15	15
9		3	4	4	10
	0	11	46	72	83

Criterion 2
All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	1	2	9	4
1			1	1	3
2		1	2	2	3
3	1	2	2	5	4
4		1	10	10	4
5			4	5	2
6	1	4	6	5	5
7		6	9	17	11
8		4	16	16	11
9		3	7	5	6
	2	22	59	75	53

Criterion 3
All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	2	3	8	3
1			1	2	2
2		1	2	2	3
3	1	3	3	3	4
4		9	10	4	2
5		3	3	4	1
6	2	5	4	7	3
7	1	5	9	15	14
8	2	9	14	12	10
9	2	3	6	5	5
	8	40	55	62	47

Criterion 4
Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	2	4	1	8
1			1	1	3
2		1	1		6
3			2	4	7
4		1	4	3	17
5			1	4	6
6		1	5	4	11
7	1	1	3	13	26
8	1	1	7	15	21
9	1	1	1	7	10
	4	8	29	32	115

Criteria Related to Instructional Resources

Criterion 1

The state should provide free textbooks for all students.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	2	2	5	3	4
1		1	1	1	2
2			2	1	5
3	1		1	3	8
4		2		5	18
5		1	1	2	7
6			4	7	10
7	2	3	5	15	19
8	1	6	12	10	18
9	2	1	5	3	10
	8	16	36	50	101

Criterion 2

The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	4	7	3	1	1
1		1	4		
2		3	3		2
3	2	5	2	1	4
4	5	6	6	4	4
5	3	2	1		5
6	6	6	4	3	2
7	14	15	8	4	3
8	12	14	15	4	2
9	7	4	7	1	2
	53	63	53	18	25

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	2	7	3	4
1		2	1	1	1
2	2	1		1	4
3	2		2	5	2
4		4	6	8	7
5	2	4	2	1	2
6	1	3	6	4	7
7	4	3	15	13	9
8	6	11	15	8	7
9	4	5	7	2	2
	21	35	61	46	45

Criteria Related to Finance and Administration

Criterion 1
State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	2	4	2	3	51
1	1			2	2
2	2		2	1	3
3	3	2	2	2	4
4	2	2	6	8	7
5	1	2	2	1	4
6	1	1	2	6	11
7	7	10	7	11	7
8	10	11	6	10	8
9	9	1	2	3	5
	38	33	31	47	56

Criterion 2
The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	3	4	5	3
1		2		2	1
2	2	2	1	1	2
3	2	1		6	5
4	1	1	1	6	16
5	1	1	3	2	5
6	1	3	1	2	14
7	3	4	8	10	18
8	6	4	7	12	18
9	4	3		3	11
	21	24	25	49	93

Criterion 3
Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	2	3	4	3	4
1	1		3		1
2	3		2	2	0
3	5	5		2	1
4	5	4	9	2	5
5	1	7	1	1	1
6	2	5	4	6	4
7	10	11	6	10	7
8	13	11	13	5	5
9	7	6	1	3	4
	49	52	43	34	32

Criterion 4

Broad programs to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	2	3	1	6	2
1	1	1		2	1
2		1	1	2	4
3	1	1		8	4
4	3	3	4	7	8
5		1	3	5	1
6	3	6	3	4	5
7	8	7	5	9	15
8	3	7	4	17	15
9	2	2	3	5	9
	23	32	24	65	64

Criterion 5

Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	6	5	1	3
1	3		2		
2	6		2		
3	9		4	1	
4	13	7	4		1
5	4	3	2	1	
6	7	6	4	1	3
7	17	8	9	6	4
8	17	14	8	5	2
9	9	5	1	2	3
	86	49	41	17	16

Criterion 6
Specific courses and course content to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	1	2	9	3
1			1	2	2
2			1	1	6
3			1	3	9
4		1	4	6	14
5		1		5	5
6	2		4	6	9
7	4	6	8	11	14
8	1	3	6	17	20
9	1	1	5	3	11
	9	13	32	63	93

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	0	1	5	10
1			1		4
2	1			2	5
3				6	8
4	4	1	5	5	10
5		1	3	1	6
6	3	1	4	7	6
7	1	1	9	16	17
8	1		3	24	19
9		1	2	9	9
	10	5	28	75	94

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	2	1	5	8
1		1		2	2
2			2	2	3
3			2	6	6
4	1	3	7	6	8
5		1	1	6	3
6	2	4	1	5	9
7	2	3	19	15	5
8	3	5	17	15	6
9	1	3	6	8	3
	9	22	56	70	53

Criterion 9
Each district's schools should be utilized on a 12-month basis.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	1	5	6	2	2
1			1	3	1
2	2		2	2	2
3		2	3	7	2
4	2	2	12	3	6
5	1	1	4	2	2
6	7	7	3	3	1
7	8	11	7	13	5
8	13	6	19	4	4
9	2	3	7	2	7
	36	37	64	41	32

Criterion 10
The community and students as well as teachers and administrators should be included in developing local school district policies.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
0	0	0	1	10	5
1			1	3	1
2			1	3	4
3	1		1	6	5
4	3		3	6	12
5		1		3	7
6	1	1	5	9	6
7	1	1	11	20	10
8	1	7	10	17	12
9	1		2	8	9
	8	10	35	85	71

Additional Criteria
1. Changes in teacher training.
2. Weighting factor for remote schools or school districts.
3. Funds for in-service training.
4. Reduction of Superintendent of Public Instruction staff to controllable limit.
5. Financial ability of the district.
6. Maintenance of local control.
7. Length of time student is in school to depend on performance, not number of days.
8. Relation of state support to district performance.
9. State funds on basis of students enrolled.
10. Negotiations on state level.
11. State-wide salary schedule.
12. Amendment of negotiations act.
13. Equal financing of all district basic programs.
14. Equalized salary schedule.
15. Regional vocational schools.
16. Dependence of state support on taxable evaluation behind each student.
17. State funds on per-pupil base.
18. Full funding by state of all mandatory state programs.
19. Vocational education.
20. Local control.

Part Seven

RESPONSES OF PTA PRESIDENTS TO OPINIONNAIRE

Criteria Related to Students

Criterion 1
A state-supported kindergarten program should be available to every child in the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	2
2				1	4
3		2	1		4
4		1	1		5
5		1		2	
6				1	
7					1
8		1	1		
9					
	0	6	3	4	16

Criterion 2
Every individual in the state should be afforded the opportunity to complete a high school program or its equivalent supported by the state.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	0	3
2			1	1	3
3					7
4		1			6
5				1	2
6					1
7					1
8					2
9					
	0	1	1	2	25

Criterion 3
Specialized instruction and/or noninstructional programs and service, fully supported by the state, should be provided for the following groups of students:

Racial minority, urban

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	1	0	1
2		1	1		3
3	2	1		2	1
4			3	1	2
5	1		1	1	
6		1			
7		1			
8			1		1
9					
	3	5	7	4	8

Racial minority, rural

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	1	0	1
2		1	1	2	1
3	2	1	1	1	1
4			3	1	2
5	1		1	1	
6		1			
7			1		
8			1		1
9					
	3	4	9	5	6

Handicapped

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	2
2		1	1	1	2
3			1	1	5
4			2		5
5				2	1
6				1	
7				1	
8			1		1
9					
	0	1	5	7	16

Gifted

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	0	2
2		2	2		1
3	1		2	1	2
4		1	1	3	2
5	1		1	1	
6	1				
7	1				
8					1
9					
	4	3	7	5	8

Other, please specify

1. Vocational

Criterion 4
Each student should be offered those opportunities which will assist him in developing a positive self-concept. (This might involve development of increased and improved counseling aimed at designing for each student a program which is individualized and assures the student some degree of success.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	1	1
2			2		3
3		1	3		3
4		1	2		4
5	1			1	1
6			1		
7					1
8			1		1
9					
	2	2	9	2	14

Criteria Related to Curriculum

Criterion 1
Full state support should be provided *only* for the *essential* courses and activities required to prepare a student for immediate employment, career training and/or higher education.
Note: If you have checked "absolutely not," please indicate specific courses and/or activities which you think should be state supported even though they are not absolutely necessary to prepare a student for immediate employment, career training and/or higher education.

Physical Education
Art
Music
Foreign Languages
Human Relations
Family Life
Vocational
Counseling
Law Enforcement
City Government
Drugs, Alcohol
Driver Training
Sports
Home Economics, Shop

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	0	1	0	0
2	2	1	1		1
3	1	2	1		3
4	2	1	2	1	1
5	1		1		1
6		1			
7	1				
8	1		1		
9					
	10	5	7	1	6

Criterion 2
All students should be provided opportunities to participate in in-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in development of school policies and planning the curriculum.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	1	1	0
2				2	3
3	1	1	2	1	2
4			5	1	1
5	1	1		1	
6			1		
7	1				
8			1	1	
9					
	4	2	10	7	6

Criterion 3
All students should be provided opportunities to participate in out-of-school experiences which will enable them to develop a sense of social responsibility. (Experiences might include participation in community improvement projects and assistance in the conduct of local elections.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	1	1	0	0
2		1	2	1	1
3	1	1	1	1	3
4		1	2	3	1
5	1	1		1	
6				1	
7					1
8				1	
9					
	3	5	7	7	7

Criterion 4
The school curriculum should recognize and value cultural diversity. (This involves offering students in-school and out-of-school experiences which would expose them to the heritage, values and present life-style of culturally different groups.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	2	0
2			1	2	2
3	1	1	2	3	
4			3	1	3
5		1	1	1	
6				1	
7		1			
8			2		
9					
	2	3	9	10	5

Criterion 5
Community resources should be used to enhance the curricula offered within the school. (Such resources might include parents as well as experts from business, industry, the arts and sciences, and other appropriate areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	1	1
2			1	1	3
3			1	2	4
4			1	2	4
5			1	2	
6			1		
7					1
8			1		1
9					
	0	1	6	8	14

Criterion 6

Since different students learn different things in different ways and at different rates of speed, instruction should be individualized. (There are a variety of ways through which individualized instruction may be implemented. Some examples include: the nongraded school, team teaching and programmed instruction.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	2	0
2					5
3			2	1	4
4				5	1
5			1		2
6			1		
7					1
8			1		1
9					
	0	0	6	8	14

Criterion 7

School districts, in conjunction with other educational and noneducational agencies, should be encouraged to develop innovative programs and organizational patterns. The state should provide substantial support for development and field testing of promising programs. (A certain percent of the state aid provided each district might be set aside for this purpose.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	2	0
2	1		2	1	1
3	2		2	1	2
4		1	3	1	1
5		1	1	1	
6		1			
7		1			
8					2
9					
	3	5	8	6	6

Criteria Related to Services

Criterion 1

All school districts should offer guidance and counseling services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	2
2	1				4
3		1	1	2	3
4		1		2	3
5		1		1	1
6					1
7					1
8				1	1
9					
	1	4	1	6	16

Criterion 2

All school districts should offer health services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	0	2
2	1	1		1	2
3		1		1	5
4		2		2	2
5			1	1	1
6					1
7					1
8				1	1
9					
	1	5	1	6	15

Criterion 3
All school districts should offer food services of equally high quality. (If this criterion were applied, then weighting would be involved in providing for the needs of disadvantaged youth as well as those in remote rural areas.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	2
2		2			3
3		1	2	1	3
4	1	2	1	1	1
5			1	1	1
6				1	
7					1
8			1		1
9					
	1	5	5	5	12

Criterion 4
Free transportation should be provided any student who lives more than two miles from the school to which he is assigned.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	1	1
2		1	2		2
3	1	1		3	2
4		1	3	1	2
5			2	1	
6				1	
7					1
8					2
9					
	1	3	8	7	10

Criteria Related to Instructional Resources

Criterion 1
The state should provide free textbooks for all students.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	1	1
2			1	3	1
3		1	1		5
4			1	2	4
5		1			2
6			1		
7					1
8			1		1
9					
	0	3	5	6	15

Criterion 2
The state should provide students with instruction-related supplies, including such items as pencils, paper and physical education uniforms, which are necessary as a part of the schools' regular instructional program.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	0	1	0	0
2	4		1		
3	4	1	1		
4	4	1	2		
5		1	2		
6	1				
7					1
8	2				
9					
	17	3	7	0	1

Criterion 3
The quality and quantity of instructional materials (print and nonprint), and equipment should be equalized among the state's school districts.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	2	0
2			2		3
3		2	1		4
4	1	2		1	2
5	1		1		1
6				1	
7	1				
8		1	1		
9					
	3	5	6	4	10

Criteria Related to Finance and Administration

Criterion 1
State funds should be distributed to school districts on a basis of staff ratios. (For example, 100 percent support for 55 certificated personnel per 1,000 students.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	1	0	1
2				2	1
3	2	1		3	
4	4	1			1
5	1		1	1	
6				1	
7		1			
8		1			
9					
	8	4	2	7	3

Criterion 2
The legislature should establish a minimum state-wide salary schedule. (Note: provision would be made to revise the schedule each year.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	1	0	1	1
2	1			2	1
3	2	2	1	1	1
4	1		2	1	2
5	1		1	1	
6					1
7					1
8	1		1		
9					
	6	3	5	6	7

Criterion 3
Broad programs to be offered in the schools should be determined at the state level. (Note: a "broad program" is defined as being the K-12 language arts sequence or the mathematics sequence for those grades.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	2	0	0	1
2			2	2	1
3	1	2	1		3
4	3	1		2	1
5	1		1		
6			1		
7				1	
8			2		
9					
	5	5	7	5	6

Criterion 4
Broad programs to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	1	1
2	1			1	2
3	2		2	2	1
4	1	1	1		4
5	1				2
6					1
7	1				
8			1	1	
9					
	7	1	4	5	11

Criterion 5
Specific courses and course content to be offered in the schools should be determined at the state level. (A "course" as usually defined is a one-semester or one-year segment within a broad program. For example, Biology I would be a one-semester or one-year segment within the science program.)

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	2	0	0	0	1
2	1		2	1	1
3	3	3			1
4	4	1		2	
5	1		1		
6			1		
7					1
8	1				1
9					
	12	4	4	3	5

Criterion 6
Specific courses and course content to be offered in the schools should be determined at the local level.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	0	2
2				1	3
3	1			3	3
4				2	4
5	1				2
6					1
7	1				
8		1			1
9					
	4	1	0	6	16

Criterion 7
Each school district should define what constitutes basic education for that district above and beyond minimum state requirements.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	0	2
2				2	3
3			1	2	4
4			1	2	4
5			1		2
6					1
7					1
8	1			1	
9					
	2	0	3	7	17

Criterion 8
Budgeting systems should be established within the schools to generate consistent cost, enrollment, staff and other statistical information as a basis for future comparisons of program and course costs on state-wide, district and intradistrict levels.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	0	1	2
2				1	4
3		1	2	1	3
4		2		1	3
5			1		2
6					1
7					1
8			1		1
9					
	0	3	4	4	17

Criterion 9
Each district's schools should be utilized on a 12-month basis.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	0	0	1	1	1
2	2			1	2
3			2	1	4
4		2	1	1	3
5			1		2
6					1
7					1
8	1		1		
9					
	3	2	6	4	14

Criterion 10
The community and students as well as teachers and administrators should be included in developing local school district policies.

	Lowest Priority (Absolutely) "No"				Highest Priority (Absolutely) "Yes"
1	1	0	0	1	1
2				2	3
3				2	5
4		1	1	3	2
5	1		1	1	
6					1
7					1
8			1		1
9					
	2	1	3	9	14

Additional Criteria

1. Vocational schools should be established.
2. Extra curricular activities should be expanded.
3. School administration should be conducted by a business specialist, not an educator.
4. Small districts should offer same courses as large districts.

Appendix B

OPINIONS OF LOCAL LEADERS REGARDING WASHINGTON'S EDUCATIONAL PROGRAMS

Appendix B

OPINIONS OF LOCAL LEADERS REGARDING WASHINGTON'S EDUCATIONAL PROGRAMS

The Temporary Special Levy Study Commission was set up in 1969 by the legislature to examine ways essential types of education can best be provided for all pupils in all of Washington's school districts. The study covers education of children and youth through completion of high school. It does not deal with community college or university education.

Commission Purpose

One major Commission goal is to explore possibilities for providing state funds to finance types of instruction deemed essential to enable all pupils to become competent adults and to maintain Washington's progress and prosperity. The Commission hopes that if this can be done, fewer school districts will have to rely so heavily on special levies to finance essential aspects of instruction.

The Commission assumes that a careful review of economic and social trends and projections will help show what types of instruction are most essential for the present and the near future. To this end it has reviewed the reports of numerous public and private agencies and commissions, from which it has extracted reliable information about emerging economics, social and civic conditions and needs. Major sources of such information are listed in Attachment One.

A summary of information obtained from these sources was published in "Education for the 1970's," and was made available for public discussion. This information provides a broad picture of the conditions in which pupils now in school will live and work as adults. Such information indicates the major kinds of capabilities pupils will need to become productive and responsible citizens. Obviously, Washington's continued progress and prosperity depend largely on adequate provisions for enabling young citizens to acquire such capabilities.

Public Discussion and Opinion

The Commission believes that citizens' opinions about the importance of various types of instruction should play a major role in its recommendations. For this reason, in May 1970, the Commission held 20 all-day conferences of local leaders in various parts of the state. These conferences were held in Seattle, Bellingham, Longview, Omak, Vancouver, Everett, Edmonds, Kent, Spokane, Wenatchee, Bellevue, Aberdeen, Tacoma, Olympia, Port Angeles, Walla Walla, Pasco, Yakima, Moses Lake and Cheney.

Commission members, school board members and school district superintendents nominated local leaders from 149 communities to express their views about the importance of 7 major aspects of public education. Governor Daniel J. Evans sent each nominee a personal invitation to attend. All conferences were open to the public and representatives of the communications media; a total of 1,143 persons attended.

Each conference was organized into morning and afternoon sessions so that small groups of participants could examine facts and express their views about the following aspects of education.

Early Childhood Education
Elementary and Middle School Education
High School Education
Vocational-Technical Education
Special Services for Pupils with Special Needs
Learning Materials
Administrative Services

Each participant used a copy of "Education for the 1970's" to obtain background for informed discussion. Participants worked with one discussion group in the morning session and with another during the afternoon session.

The Commission sought to emphasize purposeful and candid discussions. Discussion questions were prepared to serve the following purposes:

Activate analytical thought and judgement.
Assure freedom for expression of different points of view.
Stimulate analysis of values of types and qualities of instruction and services.
Emphasize constructive criticism and suggestion.
Avoid unrealistic oversimplified, yes-or-no, all-or-nothing reactions and mere negative accusation.

Questions were phrased to focus discussion on subjects shown to be important by the assessment of present and emerging needs described above.

Anonymous opinionnaires were prepared so that after discussion, each participant could confidentially give the Commission his personal views about the importance of various types of instruction, guidance, counseling, health service, recreation and administrative service. At the close of each session, participants anonymously recorded their views on opinionnaires. For each aspect of instruction or service, they marked spaces titled as follows:

Favor Less Emphasis	Favor Present Emphasis	Favor More Emphasis	Favor Major Change

Most participants filled out one opinionnaire after a morning discussion of one subject and another after discussion of a different subject during the afternoon. A few did not remain for afternoon discussions. Participants filled out a total of 1,884 opinionnaires.

Table 1 shows the numbers of opinionnaires filled out by participants engaged in various types of occupations.

Table 2 shows the numbers of opinionnaires filled out by participants who participated in discussions of each of the 7 conference subjects.

The Seven Major Elements of the Educational Program

As noted above, most persons participating in local conferences were invited on the basis of their leadership roles in their home communities. The opinions reported below should not be viewed as a cross section of all citizens' opinions. They can be viewed as representative of the views of local leaders who are identified with the occupational groups shown on Table One.

Tables 3, 4, 7, 10, 11, 12 and 13 show the percentages of local conference participants favoring more, present and less emphasis on specific aspects of each of the 7 conference subjects. These tables also show percentage of participants favoring major change. Those favoring major change were requested to write descriptions of the changes they would recommend. These recommendations are being analyzed for a subsequent report.

Each participant was requested to write his occupation on each of the two opinionnaires he filled out. At the outset of this study, the staff speculated that the opinions of teachers and school administrators might differ markedly from those of other citizens. Analysis of differences in the opinions among persons engaged in various types of occupations indicates that they are not significant; indeed the similarities of opinion are much greater than the differences.

Each participant was also requested to write the name of his home town on the opinionnaires he filled out. Analysis of results shows that differences in the opinions between persons living in large and small communities, and between those living east and west of the Cascade Mountains are so slight that they cannot be deemed significant.

About 90 percent of all persons attending the 20 local conferences favor either present or more emphasis on most of the educational elements listed on the opinionnaires. Of that 90 percent, about half favor more emphasis.

Local leaders demonstrated exceptionally great interest in putting more emphasis on vocational education. There was equal interest in means of tailoring instruction, guidance and counseling to fit the different capabilities and needs of individual pupils.

Numbers of conference participants attending discussions on early childhood education, special services for pupils with special needs, and learning materials were only about half the numbers attending other discussions. However, exceptionally large percentages of those participants favor more emphasis on those aspects of the state's educational program. (See Tables 3, 11 and 12.)

Large percentages of participants also favor more emphasis on instruction and activities aimed at helping pupils enlarge their capacities to reason and to acquire attitudes and capabilities that foster life-long learning and self-discipline.

Early Childhood Education

A total of 206 participants filled out opinionnaires on nine aspects of early childhood education. Relatively few conference participants chose to attend the groups discussing this subject, but the analysis of need reported in "Education for the 1970's" indicates the growing importance of early childhood education. And as Table 3 clearly shows, a substantial majority of those who did discuss this subject favor more emphasis on all aspects of early childhood education except kindergarten.

Elementary and Middle School Education

A total of 352 participants filled out opinionnaires on 46 aspects of elementary and middle school education.

Table 4 shows the percent of conference participants favoring various degrees of emphasis on each aspect. Most participants favoring "major change" wrote specific suggestions. These suggestions are being analyzed for a subsequent report.

Table 5 shows percent of participants who favored more emphasis on 29 aspects of elementary education. Relatively few favored less emphasis on any aspect.

Table 6 shows five aspects which 10 percent or more of the participants thought should be given less emphasis.

Clearly, most local leaders feel that practically all aspects of elementary and middle school education should be given their *present emphasis* or *more emphasis.*

High School Education

A total of 364 participants filled out opinionnaires on 75 aspects of high school education.

Table 7 shows the percent of participants favoring various degrees of emphasis on each aspect. Most participants favoring "major change" wrote specific suggestions. These suggestions are being analyzed for a subsequent report.

Table 8 shows the percent of participants who favored more emphasis on 24 various aspects of high school education. Relatively few favored less emphasis on any aspect.

Table 9 shows 13 aspects which 10 percent, or more, of the participants thought should be given less emphasis.

Clearly, most local leaders feel that practically all aspects of high school education should be given their *present emphasis* or *more emphasis.*

Vocational-Technical Education

Table 10 shows the percent of participants who favored various degrees of emphasis on various aspects of vocational education.

It is notable that more than 50 percent of respondents favored more emphasis on 28 of the 36 aspects of vocational-technical instruction and guidance.

Very few participants thought any aspect of vocational education should be given less emphasis. Only three aspects were throught to rate less emphasis by as much as eight percent of the participants.

Special Services for Pupils with Special Needs

A total of 151 participants filled out opinionnaires on eight types of special services.

Table 11 shows the percent of participants favoring various degrees of emphasis on each aspect. Most participants favoring "major change" wrote specific suggestions. These suggestions are being analyzed for a subsequent report.

It is notable that between 47 and 61 percent of all participants favored more emphasis on all eight types of special services. Only one type was thought to rate less emphasis by as much as five percent of the participants.

Clearly, most local leaders feel that practically all aspects of special services for pupils who need them should be given *more emphasis.*

Learning Materials

A total of 130 participants filled out opinionnaires on 10 types of learning materials.

Table 12 shows the percent of participants favoring various degrees of emphasis on each type. Most participants favoring "major change" wrote specific suggestions. These suggestions are being analyzed for a subsequent report.

From 42 to 86 percent of all respondents favored more emphasis on all 10 types of learning materials. Very few favored less emphasis on any type. The highest percent favoring less emphasis was 5.5 percent for magazines.

Administrative Services

A total of 338 participants filled out opinionnaires on 20 aspects of administrative services.

Table 13 shows the percent of participants favoring various degrees of emphasis on each aspect. Most participants favoring "major change" wrote specific suggestions. These suggestions are being analyzed for a subsequent report.

More than 50 percent of respondents favored more emphasis on 13 of the 20 aspects of administrative services. Less emphasis on school bus service was favored by 13.3 percent of respondents and on school lunches by 18.6 percent. No other aspect received less emphasis votes by as much as 10 percent of the respondents.

Table I

OPINIONNAIRES COMPLETED BY PERSONS IN EACH OF 13 OCCUPATIONAL GROUPS

OCCUPATIONAL GROUP	NUMBER OF OPINIONNAIRES
Professional	304
Technical	29
Skilled Worker	54
Commercial	147
Managerial	126
Industrial	5
Public Service	31
Agriculture	79
Homemaker	490
Education	477
Retired	7
Student	62
Others	73
Total	1,884

Table 2

NUMBERS OF OPINIONNAIRES PERTAINING TO EACH CONFERENCE SUBJECT

SUBJECT	NUMBERS OF OPINIONNAIRES
Early Childhood Education	206
Elementary and Middle School Education	352
High School Education	364
Vocational-Technical Education	342
Special Services for Pupils with Special Needs	151
Learning Materials	130
Administrative Services	339
Total	1,884

Table 3

NUMBERS AND PERCENTS OF 206 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 9 TYPES OF EARLY CHILDHOOD SERVICE AND EDUCATION

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
Information for parents about adequate child care and training.	6	3.2	34	17.9	122	64.2	28	14.7
Parent counseling centers providing advice about nutrition and care of young children.	10	5.4	29	15.6	125	67.2	22	11.8
Physical and psychological examinations that identify disabilities that need correction.	13	7.1	51	27.9	101	55.2	18	9.8
Special physical and mental health services for children with disabilities .	10	5.4	48	26.1	112	60.9	14	7.6
Clinics providing services that correct childrens' disabilities and give parents professional advice about proper home care.	8	4.6	58	33.1	96	54.9	13	7.4
Day care centers for children of working mothers.	15	8.4	38	21.3	111	62.4	14	7.9
Nursery schools.	10	5.6	58	32.2	95	52.8	17	9.4
Kindergartens.	7	3.8	102	55.7	62	33.9	12	6.6
Financial assistance to assure food and health services for children of low-income families.	23	13.8	45	26.9	85	50.9	14	8.4

Table 4

NUMBERS AND PERCENTS OF 352 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 46 ELEMENTS OF ELEMENTARY AND MIDDLE SCHOOL EDUCATION

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
INSTRUCTION AIMED AT ENABLING PUPILS TO ACQUIRE THE BASIC ABILITIES THEY NEED TO CONTINUE LEARNING.	0	0.0	78	24.1	208	64.2	38	11.7
Reading ability.	2	0.6	81	23.4	216	62.4	47	13.6
Arithmetical concepts and skills.	4	1.2	150	43.7	159	46.4	30	8.7
Writing ability.	4	1.2	122	36.1	189	55.9	23	6.8
Speaking ability.	3	0.9	104	30.5	210	61.6	24	7.0
Effective study habits.	3	0.9	64	18.9	236	69.8	35	10.4
DEVELOP INTEREST IN LEARNING	1	0.3	58	17.4	211	63.2	64	19.2
DEVELOP ATTITUDES NECESSARY FOR:								
Responsible citizenship.	9	2.7	64	19.2	213	64.0	47	14.1
Respect for other people's needs and rights.	7	2.0	56	16.4	218	63.7	61	17.8
Effective work with other people.	7	2.1	100	29.4	190	55.9	43	12.6
Good personal health habits.	9	2.6	202	59.4	111	32.6	18	5.3
DEVELOP INTERESTS AND SKILLS NEEDED FOR CONSTRUCTIVE USE OF LEISURE TIME.	23	8.0	125	43.3	116	40.1	25	8.7
Music.	11	3.3	198	59.1	106	31.6	20	6.0
Crafts.	19	5.6	189	56.1	109	32.3	20	5.9
Art.	15	4.5	192	57.1	113	33.6	16	4.8
Sports.	75	22.5	195	58.6	45	13.5	18	5.4
Hobbies.	51	15.7	159	48.9	102	31.4	13	4.0

Table 4—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
IN UPPER GRADES, SUPPLYING OF READING AND SOCIAL STUDIES MATERIALS THAT BEGIN TO ACQUAINT PUPILS WITH THE MANY KINDS OF MODERN VOCATIONAL OPPORTUNITIES.	10	3.0	63	18.8	225	67.2	37	11.0
EFFORTS TO INDIVIDUALIZE INSTRUCTION SO EACH PUPIL CAN ACHIEVE AT A PACE BEST FOR HIS OWN BACKGROUND AND ABILITIES.	8	2.4	55	16.3	200	59.3	74	22.0
Individualized programs of courses.	19	5.7	62	18.7	199	60.1	51	15.4
Individualized assignments.	11	3.3	73	22.1	199	60.3	47	14.2
Variety of short units of study so each pupil can use those which best meet his own needs.	23	7.1	88	27.2	190	58.6	23	7.1
Flexible scheduling so study can be adjusted to meet individual needs.	20	6.1	83	25.5	184	56.4	39	12.0
Student access to a variety of books, films, equipment, etc.	3	0.9	111	33.1	187	55.8	34	10.1
GUIDANCE AND COUNSELING	26	8.6	67	22.3	151	50.2	57	18.9
Information about modern occupations.	12	3.7	95	29.2	192	59.1	26	8.0
Use of tests providing teacher and parents with facts about each pupil's progress, abilities, and difficulties.	37	11.2	130	39.5	137	41.6	25	7.6
Use of tests that help teachers identify pupils' handicaps so teachers and parents can help pupils overcome them.	17	5.2	110	33.3	177	53.6	26	7.9
Student-parent-counselor conferences to make future educational plans.	9	2.7	85	25.4	207	62.0	33	9.9
Student-parent-counselor conferences to explore students' occupational opportunities and plans.	25	7.5	95	28.4	189	56.6	25	7.5

Table 4—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
Counselor-parent conferences to discuss cooperative home-school efforts to help pupils overcome handicaps.	6	1.8	92	27.6	205	61.6	30	9.0
PERSONAL SERVICES THAT SUPPORT GROWTH AND LEARNING.	17	6.3	119	44.4	107	39.9	25	9.3
Physical examinations.	31	9.5	206	63.0	77	23.5	13	4.0
Mental health examinations.	38	12.0	170	53.8	95	30.1	13	4.1
Physical exercises.	15	4.5	210	62.5	97	28.9	14	4.2
School lunches.	37	11.2	215	65.0	59	17.8	20	6.0
Special services for handicapped and disadvantaged pupils.	9	2.8	146	45.8	141	44.2	23	7.2
Health services.	23	7.1	204	62.8	84	25.8	14	4.3
Remedial Instruction.	9	2.8	105	32.9	181	56.7	24	7.5
Parent-teacher conferences.	10	3.0	126	37.8	177	53.2	20	6.0
SCHOOL CLUBS, PROJECTS AND ACTIVITIES AIMED AT HELPING PUPILS TO:								
Develop useful occupational knowledge and skills.	18	5.7	120	38.1	160	50.8	17	5.4
Apply facts and ideas of special interest to them--science, economics, health, etc.	11	3.4	118	36.2	182	55.8	15	4.6
Exercise self-discipline and personal responsibility.	7	2.1	78	23.7	209	63.5	35	10.6
Develop leadership abilities.	15	4.6	107	32.6	187	57.0	19	5.8
Participate in community improvement projects.	14	4.2	105	31.8	184	55.8	27	8.2
Develop leisure time interests and skills.	32	9.6	121	36.4	150	45.2	29	8.7

Table 5

ASPECTS OF ELEMENTARY AND MIDDLE SCHOOL EDUCATION FOR WHICH MORE THAN 50 PERCENT OF PARTICIPANTS FAVORED MORE EMPHASIS

	PERCENT
Effective study habits.	69.8
In upper grades, supplying of reading and social studies materials that begin to acquaint pupils with the many kinds of modern vocational opportunities.	67.2
Instruction aimed at enabling pupils to acquire the basic abilities they need to continue learning.	64.2
Responsible citizenship.	64.0
Respect for other peoples' needs and rights.	63.7
Exercise of self-discipline and personal responsibility.	63.5
Development of interest in learning.	63.2
Reading ability.	62.4
Student-parent-counselor conferences to make future educational plans.	62.0
Speaking ability.	61.6
Counselor-parent conferences to discuss cooperative home-school efforts to help pupils overcome handicaps.	61.6
Individualized assignments.	60.3
Individualized programs of courses.	60.1
Efforts to individualize instruction so each pupil can achieve at a pace best for his own background and abilities.	59.3
Information about modern occupations.	59.1
Variety of short units of study so each pupil can use those best meeting his own needs.	58.6
Development of leadership abilities.	57.0
Remedial instruction.	56.7
Student-parent-counselor conferences to explore students' occupational opportunities and plans.	56.6
Flexible scheduling so study can be adjusted to meet individual needs.	56.4
Effective work with other people.	55.9
Writing ability.	55.9

Table 5—Continued

	PERCENT
Application of facts and ideas of special interest to them—science, economics, health, etc.	55.8
Participation in community improvement projects.	55.8
Student access to a variety of books, films, equipment, etc.	55.8
Use of tests that help teachers identify pupils' handicaps so teachers and parents can help pupils overcome them.	53.6
Parent-teacher conferences.	53.2
Development of useful occupational knowledge and skills.	50.8
Guidance and counseling.	50.2

Table 6

ASPECTS OF ELEMENTARY AND MIDDLE SCHOOL EDUCATION FOR WHICH BETWEEN 10 AND 23 PERCENT OF PARTICIPANTS FAVORED LESS EMPHASIS

	PERCENT
Sports.	22.5
Hobbies.	15.7
Mental health examinations.	12.0
School lunches.	11.2
Use of tests providing teacher and parents with facts about each pupil's progress, abilities and difficulties.	11.2

Table 7

NUMBERS AND PERCENT OF 363 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 75 ASPECTS OF HIGH SCHOOL EDUCATION

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
INSTRUCTION AIMED AT ENABLING PUPILS TO:								
Acquire up-to-date knowledge.	9	2.6	109	32.0	184	54.0	39	11.4
Reason out ways of applying knowledge to new opportunities and problems such as:	1	4.0	2	8.0	15	60.0	7	28.0
Family living.	27	7.8	67	19.3	183	52.6	71	20.4
Community planning.	23	6.6	70	20.1	195	56.0	60	17.2
Drug abuse.	20	5.8	62	17.9	189	54.5	76	21.9
Develop interests and abilities needed for life-long learning.	7	2.1	48	14.1	206	60.4	80	23.5
Acquire useful occupational capabilities.	18	5.2	89	25.9	175	51.0	61	17.8
Develop self-discipline and accept personal responsibilities.	1	0.3	55	15.9	214	61.7	77	22.2
Succeed in an occupation immediately after high school graduation.	73	21.3	115	33.6	124	36.3	30	8.8
Succeed in advanced trade school or community college training.	22	6.5	116	34.5	162	48.2	36	10.7
Prepare for college work.	64	18.6	188	54.5	67	19.4	26	7.5
Protect the environment against pollution.	32	9.2	102	29.5	168	48.6	44	12.7
Participate in public affairs.	16	4.6	77	22.2	199	57.3	55	15.9
Participate in community improvement projects.	11	3.2	86	24.8	205	59.1	45	13.0
Participate in voting.	25	7.3	87	25.4	182	53.2	48	14.0
Participate in political activities.	37	10.9	103	30.5	155	45.9	43	12.7

Table 7—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
PARTICIPATE IN CULTURAL AND COMMUNITY CULTURAL ACTIVITIES.	4	3.0	58	43.3	58	43.3	14	10.4
Music.	22	6.5	205	60.8	99	29.4	11	3.3
Art.	19	5.7	200	59.7	106	31.6	10	3.0
Drama.	22	6.6	195	58.6	103	30.9	13	3.9
Libraries.	11	3.3	161	48.1	137	40.9	26	7.8
Community beautification programs.	24	7.4	138	42.7	137	42.4	24	7.4
Development of good personal health habits.	4	1.3	141	45.2	143	45.8	24	7.7
Constructive use of leisure time.	11	6.0	62	33.9	83	45.4	27	14.8
Music.	31	9.7	158	49.5	113	35.4	17	5.3
Drama.	31	9.8	161	50.8	107	33.8	18	5.7
Reading.	19	5.8	121	37.2	157	48.3	28	8.6
Crafts.	26	8.1	143	44.4	132	41.0	21	6.5
Art.	35	10.8	160	49.4	108	33.3	21	6.5
Sports.	41	13.0	170	53.8	84	26.6	21	6.6
Hobbies.	28	9.1	127	41.4	124	40.4	28	9.1
INDIVIDUALIZE INSTRUCTION SO EACH PUPIL CAN ACHIEVE AT A PACE BEST FOR HIS OWN BACKGROUND AND ABILITIES.	11	4.7	33	14.1	121	51.7	69	29.5
Individualized programs of courses.	26	7.8	53	15.9	183	55.0	71	21.3
Individualized assignments.	25	7.4	60	17.8	183	54.3	69	20.5
Variety of short units of study so each pupil can use those best meeting his own needs.	19	5.7	49	14.6	200	59.5	68	20.2
Flexible scheduling so study can be adjusted to meet individual needs.	23	6.8	58	17.3	184	54.8	71	21.1
Student access to a variety of books, films, equipment, etc.	6	1.8	90	26.7	178	52.8	63	18.7

Table 7—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
GUIDANCE AND COUNSELING.	14	6.1	40	17.3	117	50.6	60	26.0
Information about modern occupations.	8	2.4	78	23.1	186	55.0	66	19.5
Use of tests providing teachers and parents with facts about each pupil's progress, abilities and difficulties.	36	10.6	125	36.9	139	41.0	39	11.5
Use of tests that help teachers identify pupils' handicaps so teachers and parents can help pupils overcome them.	27	8.0	112	33.3	155	46.1	42	12.5
Student-parent-counselor conferences to make future educational plans.	10	2.9	105	30.8	169	49.6	57	16.7
Student-parent-counselor conferences to explore students' occupational opportunities and plans.	13	3.9	88	26.1	174	51.6	62	18.4
Counselor-parent conferences to discuss cooperative home-school efforts to help pupils overcome handicaps.	10	3.0	92	27.9	173	52.4	55	16.7
PERSONAL SERVICES THAT SUPPORT GROWTH AND LEARNING.	17	8.1	95	45.0	78	37.0	21	10.0
Physical examinations.	34	10.5	215	66.2	65	20.0	11	3.4
Mental health examinations.	35	10.9	189	58.9	83	25.9	14	4.4
Physical exercise.	36	10.8	199	59.6	83	24.9	16	4.8
School lunches.	52	15.8	211	63.9	41	12.4	26	7.9
SPECIAL SERVICES FOR HANDICAPPED AND DISADVANTAGED PUPILS.	7	3.3	86	40.8	98	46.4	20	9.5
Health services.	12	3.8	183	57.9	96	30.4	25	7.9
Remedial instruction.	9	2.8	127	38.8	164	50.2	27	8.3
Parent-teacher conferences.	13	4.1	128	40.0	146	45.6	33	10.3

Table 7—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
SCHOOL CLUBS, PROJECTS AND ACTIVITIES AIMED AT HELPING PUPILS TO:	3	2.4	65	52.8	41	33.3	14	11.4
Develop useful occupational knowledge and skills.	17	5.2	119	36.1	163	49.4	31	9.4
Apply facts and ideas of special interest to them--Science, Economics, Health, etc.	16	4.9	113	34.3	173	52.6	27	8.2
Exercise self-discipline and personal responsibility.	7	2.1	61	18.3	218	65.5	47	14.1
Participate in community improvement projects.	19	5.7	93	27.8	184	55.1	38	11.4
Develop leadership abilities.	9	2.7	106	31.8	181	54.4	37	11.1
Develop leisure-time interests and skills.	29	8.7	121	36.3	152	45.6	31	9.3
TYPES OF COURSES.								
Mathematics.	10	3.1	191	58.4	110	33.6	16	4.9
Industrial Arts.	15	4.6	147	45.1	146	44.8	18	5.5
Science.	7	2.1	188	57.1	116	35.3	18	5.5
Home Economics.	39	11.8	166	50.3	102	30.9	23	7.0
Social Science.	16	4.9	166	50.5	115	35.0	32	9.7
Art.	28	8.6	205	63.3	73	22.5	18	5.6
Vocational Education.	10	3.4	93	31.3	143	48.1	51	17.2
Industrial.	10	3.1	86	27.0	185	58.2	37	11.6
Commercial.	10	3.2	90	28.9	175	56.3	36	11.6
Agricultural.	25	8.2	135	44.3	116	38.0	29	9.5
Music.	35	10.7	225	69.0	54	16.6	12	3.7
English and Literature.	24	7.3	191	57.9	94	28.5	21	6.4
Physical Education.	39	11.8	209	63.3	70	21.2	12	3.6
Health.	22	6.8	198	61.1	85	26.2	19	5.9
Foreign Languages.	54	16.6	189	58.2	64	19.7	18	5.5

Table 8

ASPECTS OF HIGH SCHOOL EDUCATION FOR WHICH OVER 50 PERCENT OF PARTICIPANTS FAVORED MORE EMPHASIS

	PERCENT
Development of self-discipline and accept personal responsibilities.	61.7
Development of interests and abilities needed for life-long learning.	60.4
Reasoning out ways of applying knowledge to new opportunities and problems.	60.0
Variety of short units of study so each pupil can use those best meeting his own needs.	59.5
Participation in community improvement projects.	59.1
Vocational Education—Industrial.	58.2
Participation in public affairs.	57.3
Vocational Education—Commercial.	56.3
Reasoning out ways of applying knowledge to community planning.	56.0
Individualized programs of courses.	55.0
Information about modern occupations.	55.0
Flexible scheduling so study can be adjusted to meet individual needs.	54.8
Reasoning out ways of applying knowledge to drug abuse.	54.5
Individualized assignments.	54.3
Instruction aimed at enabling pupils to acquire up-to-date knowledge.	54.0
Participation in voting.	53.2
Student access to a variety of books, films, equipment, etc.	52.8
Reasoning out ways of applying knowledge to family living.	52.6
Counselor-parent conferences to discuss cooperative home-school efforts to help pupils overcome handicaps.	52.4
Individualized instruction so each pupil can achieve at a pace best for his own background and abilities.	51.7

Table 8—Continued

	PERCENT
Student-parent-counselor conferences to explore students' occupational opportunities and plans.	51.6
Acquisition of useful occupational capabilities.	51.0
Guidance and counseling.	50.6
Remedial instruction.	50.2

Table 9

ASPECTS OF HIGH SCHOOL EDUCATION FOR WHICH 10 PERCENT, OR MORE, OF THE PARTICIPANTS FAVORED LESS EMPHASIS

	PER CENTS
Success in an occupation immediately after high school graduation.	21.3
Preparation for college work.	18.6
Foreign language.	16.6
School lunches.	15.8
Physical education.	11.8
Home economics.	11.8
Mental health examinations.	10.9
Participation in political activities.	10.9
Physical exercise.	10.8
Art.	10.8
Music.	10.7
Use of tests providing teachers and parents with facts about each pupil's progress, abilities and difficulties.	10.6
Physical examinations.	10.5

Table 10

NUMBERS AND PERCENT OF 342 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 40 ELEMENTS OF VOCATIONAL-TECHNICAL EDUCATION

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
INSTRUCTION ENABLING PUPILS TO ACQUIRE:								
Combination of knowledge necessary for successful work in some type of occupation of interest to them.	4	1.2	36	10.9	242	73.3	48	14.5
Combination of skills necessary for successful work in occupations of interest to them.	11	3.4	54	16.6	226	69.3	35	10.7
Attitudes essential for sucessful work and occupational progress.	1	0.3	25	7.6	214	65.2	88	26.8
Backgrounds of mathematics, science and reading ability sufficient to facilitate advantageous job changes and in-service training.	2	0.6	103	31.2	182	55.2	43	13.0
Academic backgrounds sufficient to prepare students for advanced training in trade schools or community colleges.	10	3.1	118	36.2	165	50.6	33	10.1
General education in art, music and literature sufficient to assure vocational students opportunity to enrich their lives, equal to that of other students.	25	7.6	187	56.5	105	31.7	14	4.2
General education in social sciences sufficient to assure vocational students opportunity to participate in civic and political affairs equal to that of other students.	13	4.0	150	45.7	144	43.9	21	6.4

Table 10—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
GUIDANCE AND COUNSELING SERVICES THAT INFORM EACH STUDENT ABOUT:								
The wide variety of occupations in the present-day world.	3	0.9	34	10.1	213	63.6	85	25.4
Kinds of capabilities needed for successful work in various types of occupations.	1	0.3	37	11.3	230	70.1	60	18.3
The kinds of training and experience necessary for success in various types of occupations.	0	0.0	41	12.6	232	71.2	53	16.3
Parent-student-teacher career planning conferences.	10	3.0	57	17.4	183	55.8	78	23.8
Special services to prevent pupils from dropping out of school.	12	3.7	43	13.4	183	56.8	84	26.1
Special services to dropouts to encourage them to return to school.	10	3.1	46	14.1	191	58.6	79	24.2
SPECIAL INSTRUCTIONAL SERVICES FOR PUPILS WITH HANDICAPS OR DISABILITIES.	3	0.9	100	30.6	186	56.9	38	11.6
SHORT COURSES THAT CAN BE COMPLETED IN A FEW WEEKS TO PROVIDE FLEXIBILITY IN MEETING NEW OPPORTUNITIES AND NEEDS.	10	3.1	66	20.5	206	64.0	40	12.4
WORK EXPERIENCE AND PLACEMENT								
On-the-job work-study experience as part of high school training.	8	2.4	40	12.1	219	66.2	64	19.3
Employment services that help graduates or dropouts find jobs.	20	6.1	86	26.3	181	55.4	40	12.2
ARRANGEMENTS TO GET FOLLOW-UP INFORMATION ABOUT PUPILS' ON-THE-JOB PERFORMANCE AS A BASIS FOR IMPROVING TRAINING AND COUNSELING PROGRAMS.	13	4.1	38	12.1	222	70.5	42	13.3

Table 10—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No	%
PREPARE STUDENTS FOR WORK IN OCCUPATIONS SUCH AS THE FOLLOWING:								
Sales.	17	5.7	97	32.3	165	55.0	21	7.0
Agriculture.	25	8.5	131	44.7	122	41.6	15	5.1
Secretarial positions.	8	2.7	139	47.1	138	46.8	10	3.4
Equipment operation.	15	5.1	67	22.8	188	63.9	24	8.2
Equipment repair.	12	4.0	54	18.2	202	68.0	29	9.8
Building maintenance.	13	4.4	83	28.3	177	60.4	20	6.8
Accounting.	8	2.7	129	43.3	147	49.3	14	4.7
Construction.	12	4.1	75	25.7	184	63.0	21	7.2
PROVIDE STUDENTS WITH BACKGROUND FOR ADVANCED TRAINING IN:								
Electronic technology.	14	4.8	79	26.9	171	58.2	30	10.2
Business management.	13	4.4	89	30.1	163	55.1	31	10.5
Oceanography.	23	8.1	92	32.5	142	50.2	26	9.2
Airplane servicing.	23	8.1	90	31.7	150	52.8	21	7.4
Dental technology.	21	7.3	106	36.7	140	48.4	22	7.6
Sales management.	17	5.8	94	32.0	161	54.8	22	7.5
Agricultural business.	17	5.8	115	39.5	139	47.8	20	6.9
Nursing.	17	5.9	93	32.5	152	53.1	24	8.4
Commercial art.	19	6.5	112	38.4	141	48.3	20	6.8
Police service.	19	6.5	79	26.9	165	56.1	31	10.5

Table II

NUMBERS AND PERCENT OF 151 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 8 TYPES OF SPECIAL SERVICES FOR PUPILS WITH SPECIAL NEEDS

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
Examinations that show what physical, emotional and mental handicaps pupils need to overcome.	5	3.4	33	22.6	80	54.8	28	19.2
Cooperative school and community agency effort to provide physical and mental health services to correct disabilities.	4	2.7	19	12.8	91	61.5	34	23.0
Nutrition adequate for growth and for energy needed for learning.	7	4.8	51	34.9	72	49.3	16	11.0
School cooperation with other community agencies to reduce the number of pupils who drop out of school to help support families.	3	2.0	19	12.9	90	61.2	35	23.8
Remedial instruction to help pupils whose learning is lagging behind their abilities achieve to the full level of their abilities.	0	0.0	18	12.2	86	58.5	43	29.3
Guidance and counseling designed to broaden pupils' interests, goals and aspirations.	6	4.1	22	15.1	86	58.9	32	21.9
Conferences with parents to get coordination of the efforts of teachers, counselors, and parents.	0	0.0	20	13.3	98	65.3	32	21.3
Social and recreational activities that help pupils gain self-confidence and attitudes essential for participation in civic affairs and for employment.	8	5.4	47	32.0	70	47.6	22	15.0

Table 12

NUMBERS AND PERCENT OF 130 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 10 TYPES OF LEARNING MATERIALS

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
Books.	1	0.7	35	27.6	87	68.5	4	3.1
Magazines.	7	5.5	59	46.8	56	44.4	4	3.2
Films.	0	0.0	24	19.2	96	76.8	5	4.0
Recordings and tapes.	1	0.8	29	23.2	91	72.8	4	3.2
Photographs.	6	4.9	63	51.2	52	42.3	2	1.6
Models.	5	4.1	54	44.6	60	49.6	2	1.7
Self-instructional learning systems.	6	4.8	51	40.1	61	48.8	7	5.6
Television.	7	5.5	55	43.7	58	46.0	6	4.8
Drawing materials.	1	0.8	53	42.6	71	53.3	1	0.8
Materials for constructing models, charts, publications, etc.	2	1.6	54	42.5	68	53.5	3	2.4

Table 13

NUMBERS AND PERCENT OF 338 LOCAL LEADERS FAVORING VARIOUS DEGREES OF EMPHASIS ON EACH OF 20 ASPECTS OF ADMINISTRATIVE SERVICES

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
PLANNING AND MANAGEMENT.								
Plan educational programs and facilities that prepare pupils for present and near-future opportunities and needs.	16	5.0	132	41.3	146	45.6	26	8.1
Systematically assemble facts necessary to identify changing opportunities and needs.	9	2.8	100	31.1	192	59.6	21	6.5
Analyze facts to determine which opportunities and needs are greatest.	30	9.5	96	30.5	165	52.4	24	7.6
Analyze facts to ascertain which kinds of programs and services result in the most pupil progress and achievement.	15	4.7	90	28.0	186	57.9	30	9.3
Collect and analyze facts necessary to ascertain the amounts of achievement pupils get from various ways of using educational funds.	16	5.0	93	29.2	179	56.1	31	9.7
Modify programs and services in ways that get the largest pupil benefits from each kind of expenditure.	19	6.0	89	27.9	179	56.1	32	10.0
Plan school buildings designed to facilitate effective instruction and counseling.	29	9.0	132	41.1	123	38.3	37	11.5
Collect and evaluate facts necessary to show the degrees to which various kinds of instruction and counseling produce satisfactory results.	17	5.4	86	27.3	187	59.4	25	7.9
Analyze facts about changing economic circumstances and opportunities to ascertain ways instruction and counseling can be improved.	25	8.0	97	31.1	164	52.6	26	8.3

Table 13—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
Analyze operating procedures and provide board with recommendations for policy changes aimed at improvements.	9	2.8	104	32.8	169	53.3	35	11.0
To what extent do you think educational planning should be related to the planning for other community services such as housing, parks, streets, youth centers, health services, public assistance.	31	9.6	73	22.5	157	48.5	63	19.4
PERSONNEL ADMINISTRATION.								
Recruitment of well-qualified personnel.	3	0.9	82	24.8	195	58.9	51	15.4
Supervision aimed at enabling personnel to make effective use of improved teaching and counseling procedures.	6	1.9	78	24.1	193	59.6	47	14.5
PUBLIC COMMUNICATION.								
Providing facts citizens need to make decisions about educational needs and services.	9	2.7	57	17.3	189	57.3	75	22.7
Conferring with individuals, groups and organizations to discuss instructional services and needs.	7	2.1	73	22.3	195	59.6	52	15.9

Table 13—Continued

	Favor Less Emphasis		Favor Present Emphasis		Favor More Emphasis		Favor Major Change	
	No.	%	No.	%	No.	%	No.	%
PROVIDING UP-TO-DATE INSTRUCTION MATERIAL.	4	1.2	108	33.2	186	57.2	27	8.3
SCHOOL BUS SERVICE.	43	13.3	222	68.7	46	14.2	12	3.7
SCHOOL LUNCHES.	60	18.6	220	68.3	31	9.6	11	3.4
WORK WITH PARENTS AND COMMUNITY AGENCIES TO PROVIDE HEALTH EXAMINATIONS AND SERVICES NECESSARY TO CORRECT HEALTH DEFICIENCIES.	31	9.7	173	54.1	103	32.2	13	4.1
SCHOOL BUILDING AND GROUND MAINTENANCE.	12	3.9	204	66.0	79	25.6	14	4.5

BIBLIOGRAPHY

Bibliography

MAJOR SOURCES OF INFORMATION ABOUT EMERGING ECONOMIC, SOCIAL AND CIVIC CONDITIONS AND NEEDS

Benson, Charles S. *The Economics of Education.* Boston: Houghton Mifflin, 1961.

Chamber of Commerce of the United States. *Education: An Investment in People.* Washington D.C.: 1964.

Chamber of Commerce of the United States. *The Disadvantaged Poor: Education and Employment,* Washington D.C.: The Chamber.

Committee for Economic Development. *We Can Have Better Schools.* Washington D.C.: The Committee, 1962.

Education Policies Commission. *Contemporary Issues in Elementary Education.* Washington D.C.: National Education Association, 1964.

Educational Policies Commission. *Mass Media and Education.* Washington D.C.: National Education Association, 1958.

Educational Policies Commission. *Universal Opportunity for Early Childhood Education.* Washington D.C.: National Education Association, 1966.

Gardner, John. *Renewal in Societies and Men.* New York: Carnegie Corporation, 1962.

Goodlad, John, Renita Von Stoephasius, and M. Frances Klein. *The Changing School Curriculum.* New York: Fund for the Advancement of Education, 1966.

Hack, Walter G. *Educational Administration.* New York: Allyn P. Bacon, Inc., 1965.

Kirk, Childs. *Instructional Technology.* New York: Holt Rinehart & Winston, 1968.

Manpower Commission. *Report to the President.* Washington D.C.: U.S. Department of Labor, 1970.

Massachusetts Institute of Technology. *Final Report of the Summer Study on Occupational, Vocational and Technical Education.* Cambridge, Mass.: The Institute, 1965.

Nolte, Chester M. *An Introduction to School Administration.* New York: Macmillan, 1966.

President's Commission on National Goals. *Goals for Americans.* Englewood Cliffs, N.J.: Prentice Hall, 1960.

Rockefeller Foundation. *Prospects for America.* Garden City, N.Y.: Doubleday, 1961.

Rockefeller Foundation. *The Pursuit of Excellence.* Garden City, N.Y.: Doubleday, 1958.

U.S. Department of Labor. *Manpower Report to the President.* Washington D.C.: The Department, 1970.

U.S. Office of Education. *Central City Educational Projects.* Washington D.C.: Bureau of Elementary and Secondary Education, 1969.

Venn, Grant. *Man, Education and Work.* Washington D.C.: American Council on Education, 1964.

COMMONALITY ANALYSIS

160/161

SUMMARY AND CONCLUSIONS

Introduction

The purpose of the Commonality Analysis was to determine the comparative status of the school districts of the State of Washington with respect to staffing, expenditures, and curriculum offerings. The results of this study are intended to be used by the Temporary Special Levy Study Commission (TSLSC) in making its definition of what constitutes a "Basic Program of Instruction and Services." It is not intended that the common program which resulted from this study be equated to the basic program which the state should guarantee to support. Other criteria, besides what was common among the programs and services offered by the various school districts of the state, obviously must be considered. Enough detail is provided in the five major sections of the Commonality Analysis for the members of the Commission to apply their additional criteria to the selection of basic programs and services. No attempt is made in this analysis to set priorities, although facts which may contribute to the setting of priorities are provided.

The data used in this analysis were obtained from the Office of the Superintendent of Public Instruction (SPI). Time restrictions required that the data already available at SPI be used for the study. This meant using the data from the 1968-69 school year. It also meant attempting to use the data for a purpose other than that for which they were collected. Nevertheless, the unusual depth of the data (compared with the data available in many state offices of public instruction) provided a sound basis for attaining the objectives of the Commonality Analysis. The data provided a virtual census of the 2,000 school buildings and offices, the 53,000 local school-district employees, and the 759,778 pupils in the 326 school districts of the state, down to the number of pupils in each class in the 445 subjects which could have been offered. Such masses of data are characteristically subject to gross reporting and recording errors; the SPI data were no exception. The particular problems caused by reporting errors will be pointed out where they occur, and the effect these errors have on the analysis will be noted. Generally, the data were adequate to provide the statistics needed and, at worst, they provided upper and lower bounds on the range of the statistic of interest.

The results of the Commonality Analysis reported in the following five sections will probably raise more questions than they answer. Some of these questions would require an in-depth research effort, for example:

- What is the best index of a school district's ability to support a quality education?
- What is the best index of a school district's expenditure per pupil?
- How can a meaningful comparison of curriculum offerings be made which gets at the subject matter presented in any given subject? (Comparisons in this study were made at the course and curriculum area level.)
- Can any measures of the quality of the education provided students be derived from the type of data used in the Commonality Analysis?
- How can the results presented above be interwoven with measures of student achievement, teach competency, and administrative efficiency to provide over-all checks on the quality of the public-education system and given direction for its improvement?

The answers to some other particular questions could be provided through further analysis of the data presently available. Some questions of this type are:

- How do teachers' class loads, in terms of numbers of pupils per class, compare among school districts for various grade levels and courses? (This would provide a better basis for estimate of teacher load than the one used–teachers' contact hours, or pupil hours divided by teachers' hours.)
- How do teachers' salaries per contact hour compare for various grade levels and courses?
- How do nonteaching assignments compare from district to district in terms of: numbers of assignments, numbers of full-time equivalent staff, ratios of students to particular staff, and added stipends for nonteaching assignments?
- What are the relationships, if any, between: per-pupil assessed valuation and place type of school district; teacher load and extent of subject offering; experience and education level of teachers, and place type or age of school district; preparation time and teaching time of teachers, etc.?

No doubt, any reader who labors through this report will be able to ask many more questions of this type. The factors that were analyzed and compared were selected to provide a basis for answering the questions which appeared most important at the start of the study or which proved to be necessary for other aspects, particularly the Funding Study, of the Commission's study. Limitations of time and funds prohibited answering some questions to the depth attainable and caused deletion of other questions from the study, in particular those regarding nonteaching certificated and special staff (counselors, librarians, instructional aides, specialists, health services staff, and others).

The author is grateful to Francis Flerchinger and Maury Whitney of the Staff Services Section of the Office of the Superintendent of Public Instruction for their assistance and efficiency in making the massive amount of data used in this report available and interpretable. Thanks are also due Dr. Paul Ford and William Moyer for their helpful suggestions and insights into the problems and promise of education in Washington State, and to my colleagues at Battelle-Northwest for their assistance and comments in the preparation of this report.

Section 1

GENERAL DESCRIPTION AND CLASSIFICATION OF SCHOOL DISTRICTS

Introduction

In order to understand better the diversity of problems faced by the school districts of the state, some method of organizing the 326 school districts active in 1968-69 must be used. Each school district, as each human being, has its own particular needs, and no "average" school district truly exists. Yet, the human mind must categorize and classify to isolate and identify the individual problems to be solved and to find direction for their solution.

The single most important variable in studies of state school systems seems to be the size of the school districts, as measured by the number of pupils served.[1] The present study classifies the school districts into nine size groups. Other general information on assessed valuation, ethnic composition of the student bodies, facilities, grade spans, etc., is also included in this section.

Definition of School District Size Groups

The nine size groups are listed in Table 1. The size groups which have nonhigh-school districts (districts which do not offer all 12 grades, although they may offer grades 7-11) are broken into two subgroups, high school (HS) and nonhigh school (NHS). The number of districts in each size group is given, along with the total number of buildings (including school-district offices) occupied by the districts in the group. The next column of Table 1 gives the total average annual enrollment (AAE) in the size groups, and the last column, the average district enrollment. An appendix of this section lists the school districts in each size group.

Figure 1 gives the percentage of full-time equivalent students in AAE for the elementary (K-6) and secondary (7-12) programs. The vertical bars give the percentage of total State AAE enrolled in each size group, the shaded area in the bars for groups 7, 8, 9 being the percentage enrolled in nonhigh districts. State-wide, 55.1 percent of the AAE was in grades K-6, 44.9 percent in 7-12. The line graphs of Figure 1 show little deviation (+ 2%) from these state-wide averages for the high-school districts until groups 8 and 9, where they converge to a 50-50 split. The line plots for the nonhigh districts showed that there were very few students in the grades above 6 for group 9.

Figure 2 displays, in line plots, the percentage of students in Driver's Education (Dr. Ed.), Approved Vocational Programs (VE), Special Education (Sp. Ed.), and Disadvantaged or Migrant Pupils (Dis). Driver's education and vocational-education percentages are relative to secondary enrollment; disadvantaged and handicapped are relative to total base enrollment. The lines under the plot titles represent the state average. The students in vocational programs are full-time equivalent students, at 900 hours a year. The driver's education students are the number of individual pupils taking driver's education, so that the two plots are not to be interpreted as expressing relative effort.

Grade Spans

The State of Washington School Code List (Superintendent of Public Instruction, September 1968-69) gives, along with other information, the the grade span for each school in the state. The grade-span information is summarized in Table 2: the row title indicates the lowest grade offered and the column heading, the highest, so that the numbers plotted between indicate how many schools cover any given number of years.

Of the 91 mathematically possible grade spans, 50 are actually present in the schools of Washington State. There are 12 schools with a grade span of one grade: eight are kindergartens; the other 4, respectively, are a first grade, a fourth grade, an eighth grade, and a tenth grade. No schools start with an eleventh or twelfth grade. All other starting grade levels are present, but only three schools start in grade three. A school can be found which terminates in any of the 13 grades. The least common termination grades are: first (two schools), second (three), tenth (five), and eleventh (two).

---

[1] **For example: *Reports of The Governor's Committee on Public School Education.* Leon Jaworski, Chairman, Glenn H. Ivy, Director, Austin, Texas, 1969, in 5 volumes, and *Education in Nevada—An Assessment.***

Table 1

DEFINITION OF SCHOOL DISTRICT SIZE GROUPS

Size Group	Average Annual Enrollment Range	Number of Districts	Number of Buildings	Total Average Annual Enrollment	Average District Annual Enrollment
1	>20,000	6	390	233,508	38,918
2	10,000-19,999	9	208	122,809	13,645
3	5,000-9,999	20	273	138,658	6,933
HS 4	2,600-4,999	29	237	100,920	3,480
NHS 4		1	9	3,393	3,393
Total 4		30	246	104,313	3,477
5	1,600-2,599	25	160	53,274	2,131
HS 6	1,000-1,599	27	127	33,716	1,249
NHS 6		1	6	1,303	1,303
Total 6		28	133	35,019	1,251
HS 7	500-999	58	231	41,710	719
NHS 7		2	6	1,361	680
Total 7		60	237	43,071	718
HS 8	200-499	50	159	16,360	327
NHS 8		15	22	4,956	330
Total 8		65	181	21,316	328
HS 9	<200	25	77	3,466	133
NHS 9		58	58	3,343	58
Total 9		83	135	6,809	81
Total HS		249	1,862	744,421	2,978
Total NHS		77	101	14,356	186
Total State		326	1,963	758,778	2,320

Figure 1

PERCENTAGE DISTRIBUTION OF STUDENTS IN THE ELEMENTARY AND SECONDARY PROGRAMS, AND IN THE SIZE GROUPS

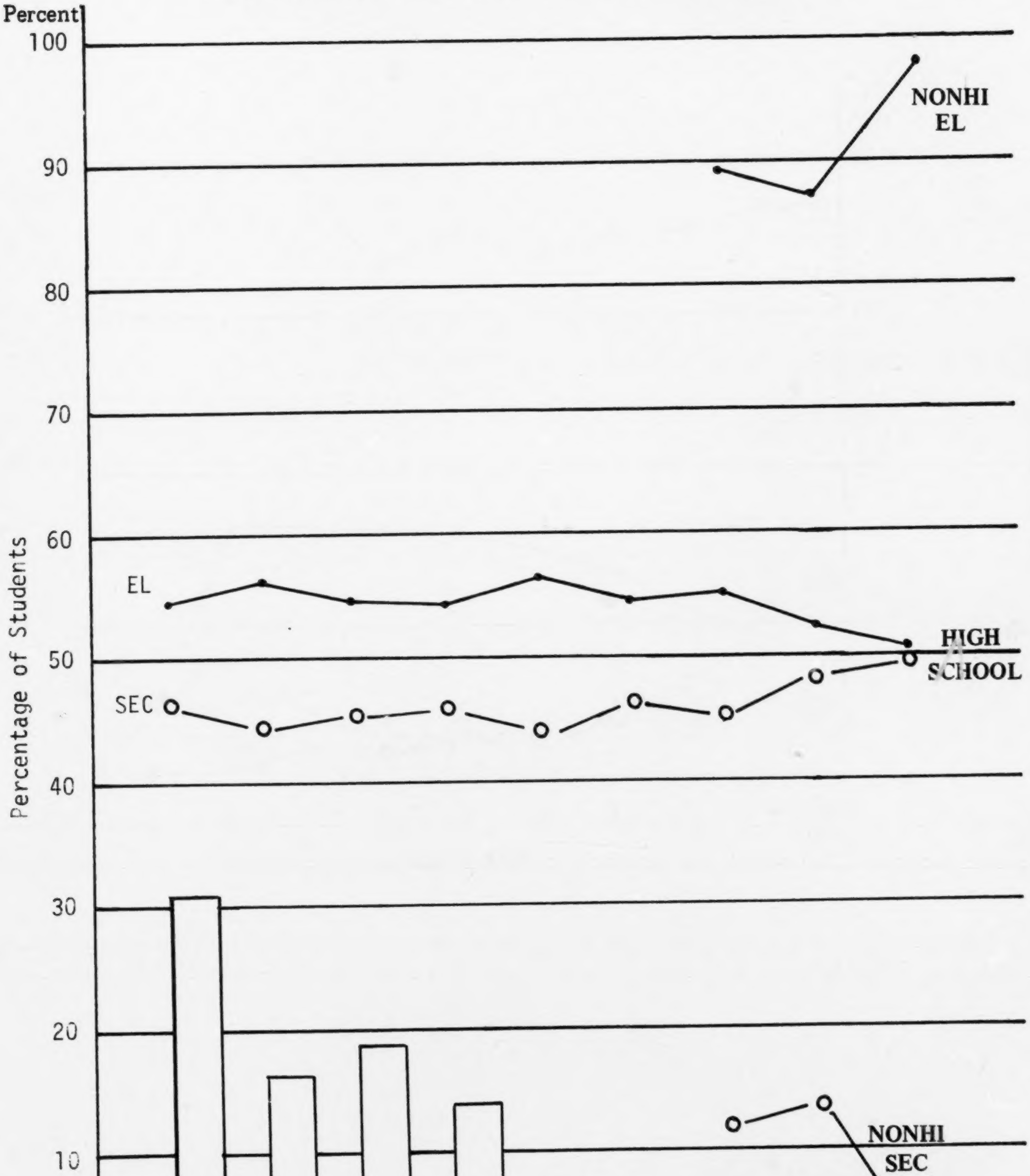


Figure 2

PERCENTAGE OF STUDENTS IN SOME PARTICULAR PROGRAMS

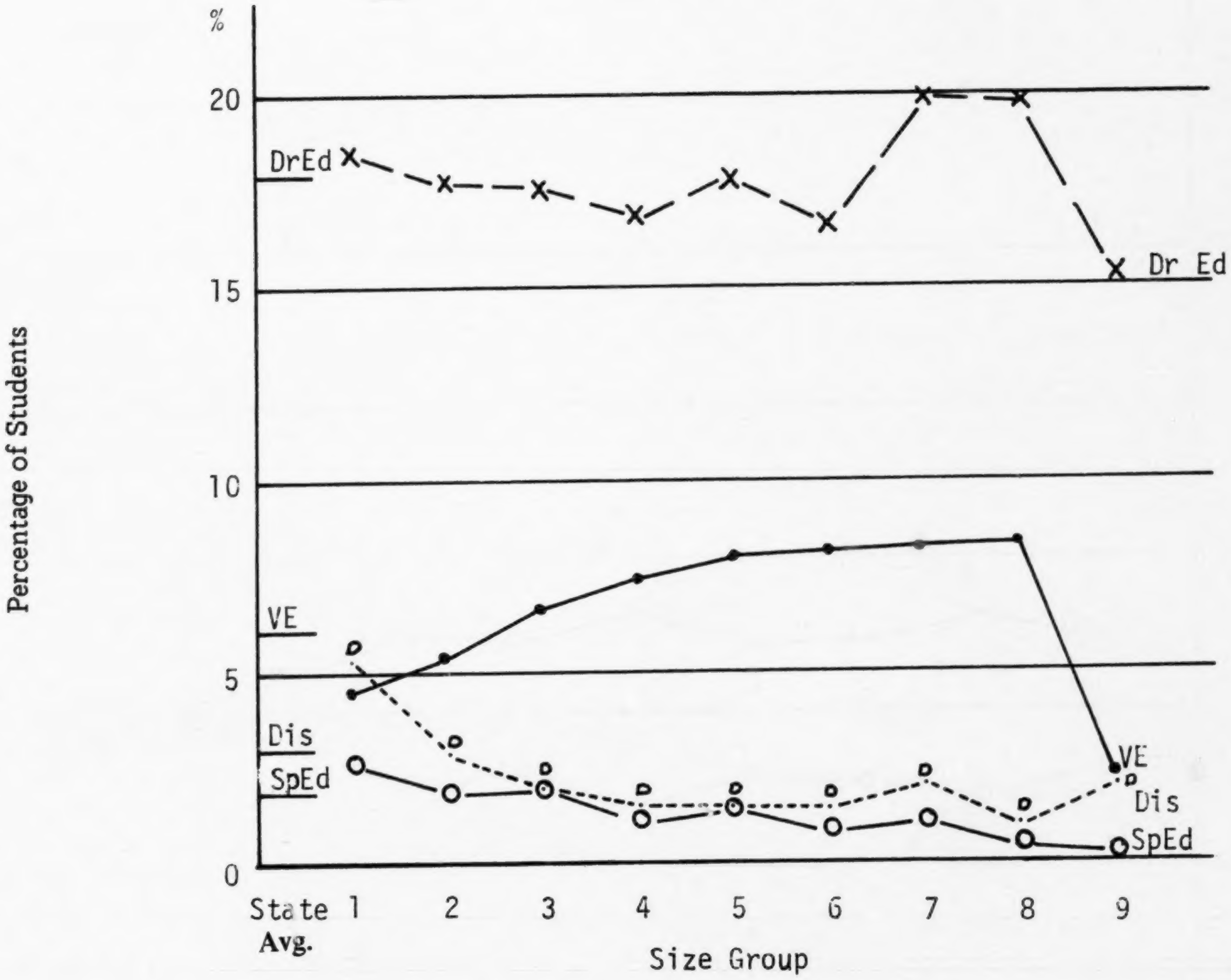


Table 2

FREQUENCY DISTRIBUTION OF GRADE SPANS

Lower Limit	Upper Limit of Grade Span K	1	2	3	4	5	6	7	8	9	10	11	12	No. of Schools Beginning with Lower Limit
K	8	1	1	21	15	39	583	7	50	2	1	0	0	728
1		1	2	13	13	19	165	8	109	0	1	0	3	334
2			0	1	0	3	6	1	0	0	0	0	0	11
3				0	0	0	3	0	0	0	0	0	0	3
4					1	3	21	0	3	0	0	0	1	29
5						0	4	4	8	1	0	0	0	17
6							0	2	13	5	1	0	0	21
7								0	26	159	0	0	37	222
8									1	3	1	0	4	9
9										0	0	2	143	145
10											1	0	107	108
11												0	0	0
12													0	0
No. of Schools Ending with Upper Limit	8	2	3	35	29	64	782	22	210	170	5	2	295	1627

Table 3

NUMBER OF BUILDINGS OFFERING GRADES IN 1-6, 7-9, AND 10-12 SPANS

Size Group	1-6	7-9	10-12	SD Total Individual Buildings	No. of SD's
1	257	89	40	390	6
2	142	33	19	208	9
3	174	48	27	273	20
4	150	48	30	246	30
5	82	55	25	160	25
6	62	48	28	133	28
7	99	104	59	237	60
8	71	94	50	181	65
9	84	74	25	135	83
State Total	1121	593	303	1963	326

The most common grade spans in the 1,627 schools of the state, accounting for 1,157, or 71 percent, of the schools, are: K-6 with 583 schools, 1-6 with 165, 7-9 with 159, 9-12 with 143, and 10-12 with 107. When the K-8 and 1-8 schools are added, 81 percent are accounted for. There are 728 schools with a kindergarten, and 334 schools which have a first grade, but do not have a kingergarten. There are 295 schools offering the twelfth grade and 1,054 offering the first grade.

For the purposes of the commonality study, schools have been classified into four categories based on grades for which enrollment is reported on the SPI Form M-70-S as contained in the School Information File. These four categories are K, 1-6, 7-9, and 10-12. They are not mutually exclusive with respect to schools, e.g., the school which has a K-10 grade span would contribute information to each of the four categories since it has enrollment in each category. Table 2 shows that there are 728 schools with kindergartens. There are 1,121 schools with enrollment in the 1-6 grade span, 593 schools have students in the 7-9 range, and 303 schools report enrollment in the 10-12 range. Table 3 gives a breakdown by size groups. The fact that these four categories of grade groupings were selected does not reflect any bias towards this particular grade structure for school buildings. It is merely a way of bringing some order into the data summarizations.

Urban-Rural Classification

The school districts of the state were classified into five categories based on the "Population of Incorporated Places of 1,000 Inhabitants or More" (Table 2 of 1970 Preliminary Report, 1970 Census of Population, Washington, PC(P1)-49, U.S. Bureau of the Census, pp. 3-4). The categories were defined as follows, using the population of the location of the school-district office.

Urban: more than 40,000 population.
Suburban: more than 15,000 and near an urban area.
City: 10,000-40,000 population.
Town: 1,000-10,000 population.
Rural: less than 1,000 population.

The number of school districts in each size group classified into each of the place-type categories is given in Table 4. The number of districts which received remote elementary funds and the number which received small -high school funds are also given.

The classification of each district into its "place type" is given in the Appendix to this section. (See column headed "Place Type.") The place-type classification was not used in any of the analyses done to date. It is presented here for any additional understanding of the school districts it may bring to the Commission.

Assessed Valuation

The assessed valuation on the property within a school district is an important variable to consider in a state where schools are heavily supported through property taxes. This is particularly the case when a large percentage of support for the schools comes from special levies against property.

There was a broad range in per-pupil assessed valuation across the state, from a low of $25 per pupil to a high of $169,000. Five percent of the 326 school districts had per-pupil assessed valuations below $4,000, 10 percent below $4,600, 50 percent fell in the range between $6,000 and $16,500, 10 percent were above $30,000, and 5 percent above $55,000. Figure 3 displays, in bar charts, the minimum and maximum interquartile range (which includes 50 percent of the observed per-pupil assessed valuations) and the median value for each size group. The broken-line bars indicate that a single school district caused an "outlying" maximum or minimum. Except for the outlying school district (Mukilteo, which was a non-high-school district in 1968-69), the school districts of size group 4 (2,600 to 5,000 pupils) had the smallest over-all range and interquartile range and the lowest median assessed valuation, $5,870. This was almost $3,000 below the state-wide median of $8,600 and $100 below the state-wide lower quartile. After reaching this minimum, the size-group median rate increased so that the median for group 9 was four times that for group 4. Table 5 presents the data upon which Figure 3 is based.

The broad range of per-pupil assessed valuation across the state is also apparent in the frequency histogram shown in Figure 4. The most common values were between $4,000 and $8,000, accounting for

Table 4

PLACE TYPE BY SIZE GROUP

	Number of School Districts						
Size Group	Urban	Suburban	City	Town	Rural	Remote Elementary	Small High School
1	3	3					
2	3	6					
3		3	13	4			
4		2	5	17	6		
5		1		20	4		
6				18	10		
7				28	32		33
8				11	54		46
9					83	12	25
State Total	6	15	18	98	189	12	104

40 percent (125) of the school districts. Inspection of Table 6 reveals that the increase at the $20,000-$25,000 range was mainly caused by high-school districts in groups 7-9. The increase at the $[illegible]5,000-$50,000 range was contributed to by the small-high-school districts, but was caused mainly by the nonhigh districts. Groups 1-6 showed a much narrower range than the smaller districts, none having a per-pupil assessed valuation greater than $20,000. Almost two thirds of the 116 districts with more than 1,000 pupils fell in the range between $4,000 and $8,000. The small-high-school districts placed only one third of their 133 districts in this range, and the nonhigh districts had one eighth of their 75 districts in the $4,000 to $8,000 range.

The per-pupil assessed valuation for the nonhigh districts is not strictly comparable with that for the high-school districts, since the potential student base is limited by the grade span offered in the nonhigh districts. Per-pupil assessed valuation is currently calculated using the number of students served by the district. This practice contributes to the inflation of the per-pupil assessed valuation for the nonhigh districts, which are taxed for their high-school pupils through the county high-school levy against nonhigh-school districts (under the provisions of RCW 28A.44). A rough estimate of the median per-pupil assessed valuation in the nonhigh districts can be obtained by estimating the total number of students in these districts who go to high school in another district. Assuming that the 14,356 students in the nonhigh districts attend grades 1 through 8 and that they constitute eight twelfths (75 percent) of the total school-age children in these districts, there would be 3,589 going to grades 10-12 outside their home district for a total of 17,945 students. The addition of these students would cause a corresponding 25 percent drop in the median per-pupil assessed valuation, from $17,500 to $13,125, which is still about

Figure 3

PER-PUPIL ASSESSED VALUATION BY SIZE GROUP

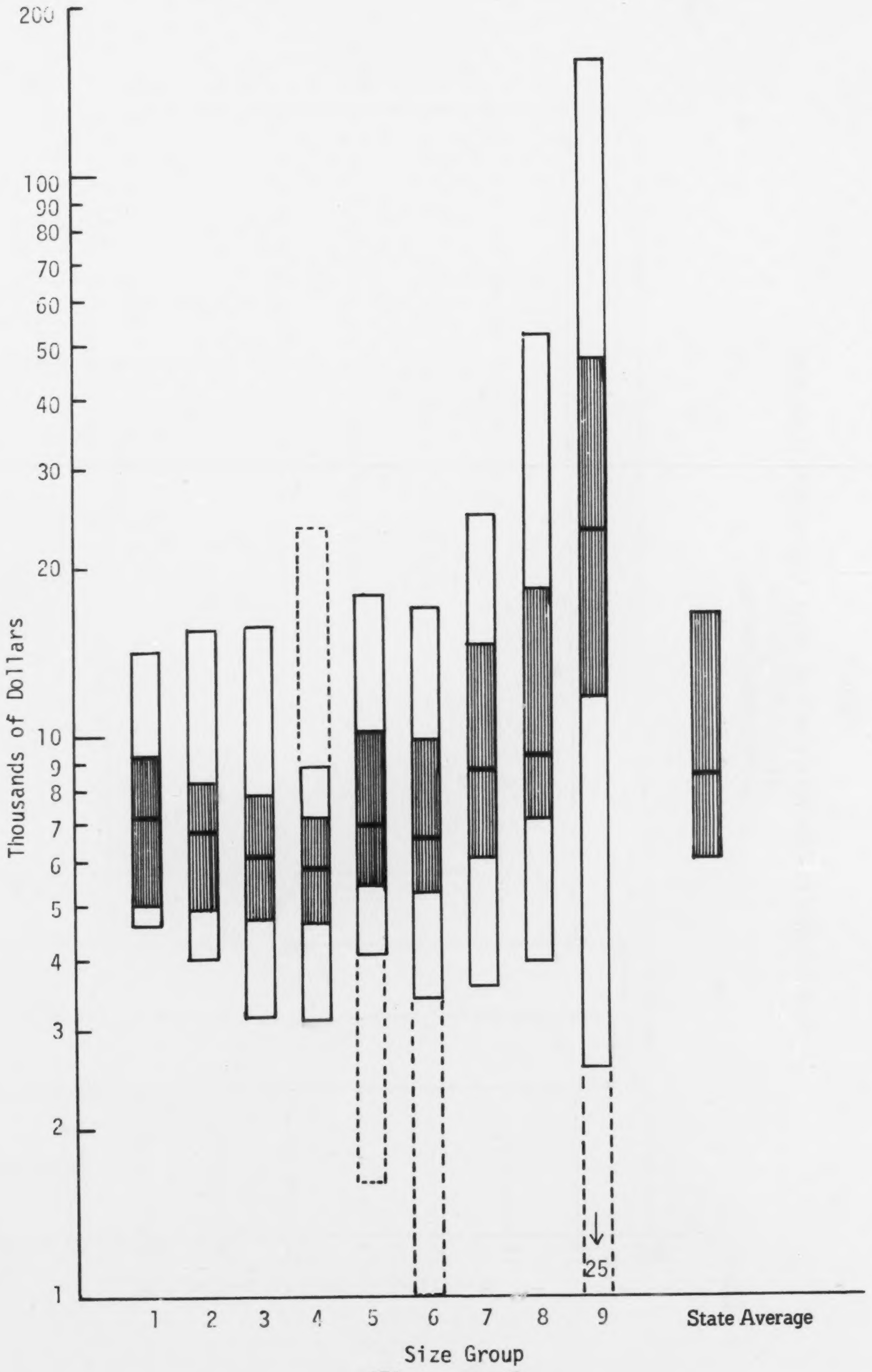


Figure 4

FREQUENCY HISTOGRAM FOR PER-PUPIL ASSESSED VALUATION
ALL 326 DISTRICTS
(Note Unequal Intervals)

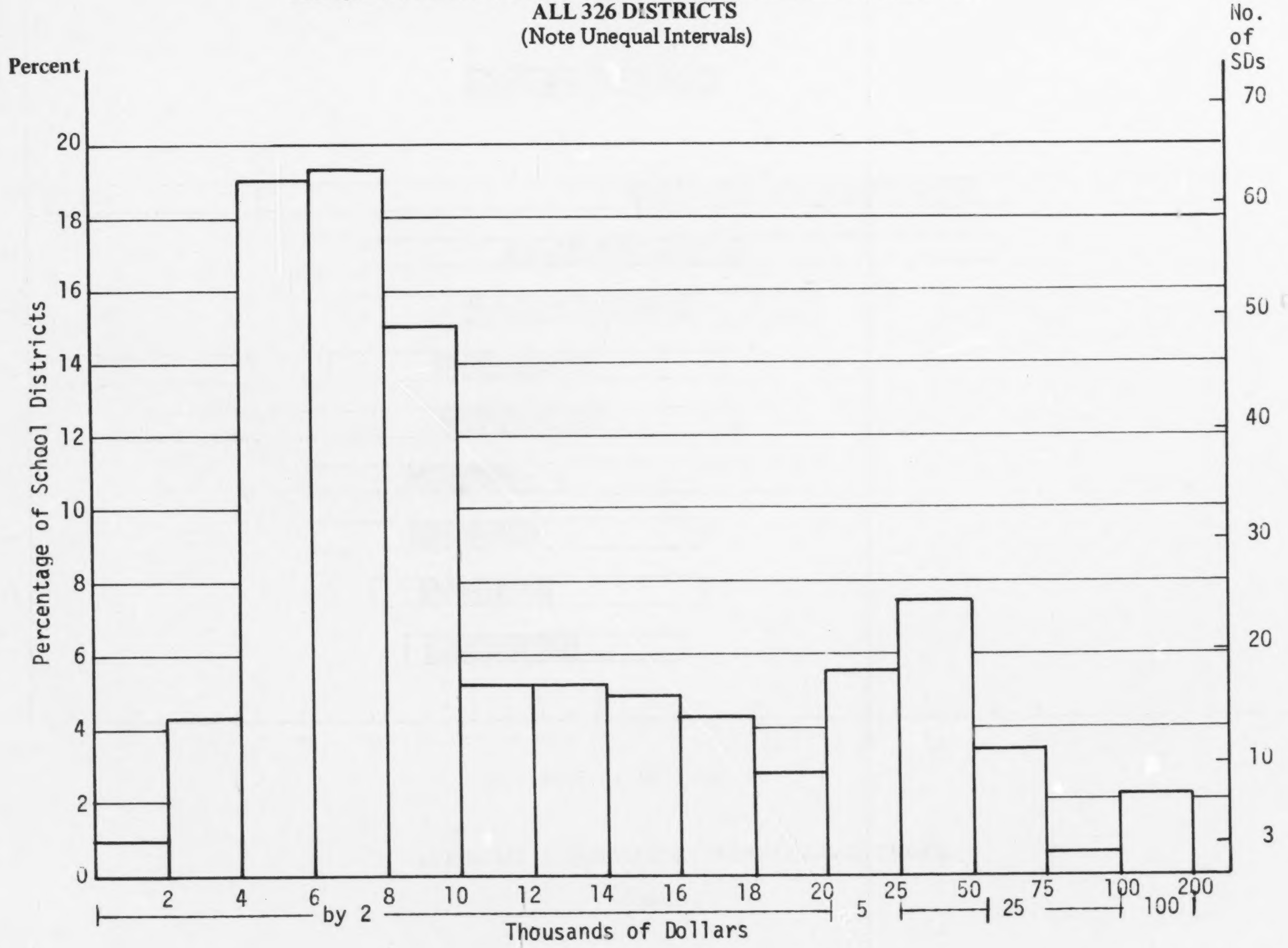


Table 5

SUMMARY STATISTICS FOR PER-PUPIL ASSESSED VALUATION FOR EACH SIZE GROUP

Size Group	Minimum	Q_{25}	Median	Q_{75}	Maximum
1	$ 4,622	$ 5,071	$ 7,223	$ 9,319	$ 14,229
2	4,027	4,932	6,822	8,325	15,522
3	3,166	4,753	6,139	7,905	15,751
4	3,115	3,662	5,869	7,211	23,667
5	1,611	5,419	6,997	10,295	17,941
6	915	5,300	6,604	9,859	16,950
7	3,597	6,040	8,812	14,520	24,756
8	3,939	7,102	9,327	18,297	52,091
9	25	11,696	23,131	46,938	168979
State Average		$ 6,041	$ 8,602	$ 16,449	

$4,500 above the state-wide median. A similar calculation for the nonhigh districts of size group 9 resulted in a reduction of the median from $25,000 to $18,750.

There is an important point to be stressed before leaving this assessed-valuation summary. The "hook-shaped" curve formed by the medians of Figure 3 is characteristic of many of the variables to be investigated in subsequent sections of the Commonality Analysis and in the Funding Study. It should be remembered that expenditures are limited by available revenue and that the state guarantee of $368 in 1968-69 was 62 percent of the average total cost per *weighted* pupil ($590). In this context, the unnoticed medium-size school districts take on a new interest; the question arises as to what services they cut out in order to make ends meet.

Ethnic Composition of Student Bodies

Each year, on October 1, the school districts submit to the Office of the Superintendent of Public Instruction a "School Enrollment Report" (M-70-S) on which are entered the minority-group enrollments in the district for the following: Negro, Oriental, American Indian, Spanish-Surnamed American. Table 7 gives the percentage of the total enrollment in each size group that was reported in each minority group. The "Other" column is the percentage based on the difference between the total enrollment and the sum of the reported minority group enrollments.

Table 6

FREQUENCY DISTRIBUTION FOR PER-PUPIL ASSESSED VALUATION RANGES—PERCENTAGE OF TOTAL DISTRICTS IN GROUP

Range (Thousands of dollars)	State	High School District 1-6	High School District 7-9	Non High District 7-9
$ 0-2	0.9	0.9		1.3
2-4	4.3	6.0	4.5	1.3
4-6	19.0	32.8	15.0	5.3
6-8	19.3	31.0	15.8	8.0
8-10	15.0	15.6	14.3	16.0
10-12	5.2	4.3	4.5	8.0
12-14	5.2	2.6	8.3	4.0
14-16	4.9	4.3	6.8	2.7
16-18	4.3	2.6	5.3	5.3
18-20	2.8		4.5	4.0
20-25**	5.5		10.5	4.0
25-50**	7.4		9.0	16.0
50-75**	3.4		0.8	7.5
75-100**	0.6			2.7
>100**	2.1		0.8	8.0
Number of Districts	326	116	133	75*

---

* Does not include Mukilteo (in group 4) or DuPont (in group 6), although these districts are included in "State" column.

Note unequal intervals.

Negro

State-wide, 2.38 percent of the students (about 19,000) were Negroes. The size-group averages range from 5.88 percent in size group 1, down to 0.04 percent in size group 8. Over half of the state's Negro students (54.1 percent) are in Seattle. Tacoma accounts for 18.5 percent, Clover Park 4.7 percent, Spokane 2.8 percent, Yakima 2.3 percent, Pasco 2.2 percent, and Bremerton 1.8 percent. These percentages confirm the urbanization of the Negro population observed in other studies.

Oriental

There were 10,060 Oriental pupils, or 1.25 percent of the state-wide enrollment. Orientals were somewhat more evenly distributed over the size groups than were Negroes, ranging down from 2.34 percent in group 1 to 0.35 percent in group 9. Less than half of the Orientals (44.1 percent) were in Seattle. The more even distribution is most likely a result of their being Orientals engaged in agriculture.

Indian

There were 9,669 Indian students (1.2 percent of the state total). The size-group averages reversed the order for the previous two minority groups ranging upward from 0.49 percent in group 2 to 11.18 percent in group 9. The high concentration of Indian students in the smaller districts is to be expected considering the rural locations of the various Indian reservations.

Spanish-American

The state-wide percentage was 1.59 percent, or 12,775 pupils. The size-group averages followed a bow-shaped curve, rising from 0.88 percent in groups 1 and 2 to 3.55 percent in group 5, then falling off to 0.45 percent in group 0 9. Permanent Spanish-American population is located mainly in the medium-sized communities dependent upon an agricultural economy, causing the bow-shaped curve.

Table 7

PERCENTAGE OF TOTAL OCTOBER 1, 1968 ENROLLMENT REPORTED AS NEGRO, ORIENTAL, INDIAN, SPANISH-AMERICAN OR OTHER

(Size Group Averages)

Size Group	Negro	Oriental	Indian	Spanish-American	Other
1	5.88 %	2.34 %	.66 %	.88 %	90.25 %
2	1.43	1.06	.49	.88	96.13
3	1.00	.75	.69	1.43	96.13
4	.26	.63	1.82	2.83	14.45
5	.60	.84	1.12	3.55	93.89
6	.93	.60	2.18	2.64	93.64
7	.24	.49	3.43	2.08	93.76
8	.04	.39	2.80	1.24	95.53
9	.06	.35	11.18	.45	87.97
State Average	2.38 %	1.25 %	1.20 %	1.59 %	93.59 %

Section 1

APPENDIX

LISTING OF SCHOOL DISTRICTS

LISTING OF SCHOOL DISTRICTS

The listing of school districts contains the 326 districts given in the SPI report, "Computation of Net Costs Per Pupil for General Fund Operations, 1968-69, K-12 Programs." The information provided under each column heading is as follows:

CO – The sequence number assigned to each county after the counties have been listed in alphabetical order.

SD – The school district identification number. *Note*: It is necessary to use both the CO and SD number to identify a school district uniquely.

NAME – The name of the school district, which usually corresponds to the place where the school district office is located.

SIZE GROUP – The size group to which the district was assigned based on its average annual enrollment.

PLACE TYPE – The group to which the district was assigned, based on the population of the location of the school district office, coded as follows.

Code	Group	Definition
1	Urban	More than 40,000 population.
2	Suburban	More than 15,000 population and near an urban place.
3	City	10,000-40,000 population and not suburban.
4	Town	1,000-10,000 population.
5	Rural	Less than 1,000 population.

K – A blank entry indicates that Kindergarten was offered in the district, a "1," that it was not.

HS-NHS – A "1" indicates that the district was a high school district, a "2" that it was a nonhigh district.

GROUP – There are two columns under this title, *EXP* and *AV*. EXP stands for per-pupil expenditure and AV for per-pupil assessed valuation. Each school district was classified as low, average, or high on each of EXP and AV, as follows.

Code	Group	Definition
1	Low	Below the 25th percentile of the district's size group.
2	Average	Between the 25th and 75th percentile.
3	High	Above the 75th percentile.

AAE RANK – The rank assigned to the school district based on its average annual enrollment (AAE), from highest (1) to lowest (326).

PP EXPENDITURE – The per-pupil expenditure as reported in the SPI report cited above.

PP ASSD VALUE – The per-pupil assessed valuation as reported in the SPI report "Assessed Valuation per FTE Pupil Enrolled on October 1, 1969." These figures were calculated using the assessed valuation for the 1970 collection year and the October 1, 1969 FTE enrollment.

Two more districts appeared in the SPI data used for the Commonality Study: Columbia, in Columbia County (ID Code 7-001) which had no students recorded, and Malaga (4-115) which became nonoperating in February 1969. These districts were also removed from consideration in the Commonality Study. One other district, Lamont (38-264) was reclassified from a high school district to a nonhigh school district, since no enrollment for grades 9-12 was recorded for it.

CO	SD	ISD	NAME	SIZE GROUP	PLACE TYPE	K	HS-NHS	GROUP EXP	GROUP AV	AAE RANK	AAE	PP EXP-ENDITURE	PP ASSD VALUE
17	1	110	SEATTLE	1	1		1	2	3	1	85852	721.35	14228
17	401	110	HIGHLINE	1	2		1	2	2	4	28841	669.21	5220
17	405	110	BELLEVUE	1	2		1	3	2	6	22371	726.40	7170
27	10	111	TACOMA	1	1		1	2	2	2	35138	706.96	7275
31	15	109	EDMONDS	1	2		1	1	1	5	26807	624.67	4621
32	81	101	SPOKANE	1	1	1	1	2	2	3	34495	679.08	7682
6	37	112	VANCOUVER	2	1		1	2	3	8	14916	670.93	8336
17	210	110	FEDERAL WAY	2	2		1	1	1	12	13316	578.27	4026
17	403	110	RENTON	2	2		1	3	3	9	14714	767.86	15521
17	412	110	SHORELINE	2	2		1	2	2	7	16523	725.33	5064
17	414	110	LAKE WASHINGTON	2	2		1	2	2	13	12412	713.23	6822
17	415	110	KENT	2	2		1	3	2	15	11253	786.29	8030
27	400	111	CLOVER PARK	2	2		1	2	1	10	14020	659.85	4798
31	2	109	EVERETT	2	1		1	2	2	11	13350	705.24	8312
39	7	105	YAKIMA	2	1		1	1	2	14	12300	592.04	6467
3	17	103	KENNEWICK	3	3		1	1	1	24	7437	585.98	4634
3	400	103	RICHLAND	3	3		1	2	1	25	7380	650.73	4119
4	246	106	WENATCHEE	3	3		1	2	3	30	5531	632.53	7927
8	122	112	LONGVIEW	3	3		1	2	3	19	8488	640.36	15751
11	1	103	PASCO	3	3		1	3	3	33	5364	672.84	8283
13	161	104	MOSES LAKE	3	3		1	2	2	31	5395	621.27	5552
14	5	113	ABERDEEN	3	3		1	2	2	35	5100	651.42	6158
17	400	110	MERCER ISLAND	3	2		1	3	2	34	5189	738.56	7068
17	408	110	AUBURN	3	3		1	3	3	23	7503	659.12	12867
17	411	110	ISSAQUAH	3	4		1	2	2	27	6398	609.69	5406
17	417	110	NORTHSHORE	3	2		1	3	2	18	8506	700.02	5398
18	100	114	BREMERTON	3	3		1	2	2	17	8516	625.81	6119
18	402	114	SOUTH KITSAP	3	4		1	1	1	32	5391	536.02	4391
27	3	111	PUYALLUP	3	3		1	2	2	16	9406	605.03	5107
27	402	111	FRANKLIN PIERCE	3	2		1	2	1	22	7802	617.32	3166
32	356	101	CENTRAL VALLEY	3	4		1	1	1	20	8329	601.90	4564
34	3	113	NORTH THURSTON	3	4		1	1	2	29	5640	544.60	6783
34	111	113	OLYMPIA	3	3		1	2	2	26	6692	635.46	7839
36	140	102	WALLA WALLA	3	3		1	3	3	28	6271	674.91	8255
37	501	108	BELLINGHAM	3	3		1	1	2	21	8310	542.12	7465
2	250	102	CLARKSTON	4	4		1	1	1	57	3032	547.10	4536
5	21	114	PORT ANGELES	4	3		1	1	2	37	4933	568.30	6734
6	114	112	EVERGREEN	4	2		1	1	2	38	4590	566.87	6198
6	119	112	BATTLE GROUND	4	5		1	2	3	47	3594	569.76	7537
8	403	112	KELSO	4	3		1	1	2	36	4950	549.82	5014
9	206	106	EASTMONT	4	5		1	2	1	51	3267	600.43	3973
14	28	113	HOQUIAM	4	3		1	1	3	56	3072	562.02	8465
15	201	108	OAK HARBOR	4	4		1	2	1	41	4262	587.50	3114
17	216	110	ENUMCLAW	4	4		1	2	3	53	3262	618.18	8303
18	400	114	NORTH KITSAP	4	4		1	3	3	64	2727	644.51	7324
18	401	114	CENTRAL KITSAP	4	5		1	2	1	43	3773	584.68	4477
19	401	105	ELLENSBURG	4	3		1	3	3	58	2962	694.93	8816
21	401	113	CENTRALIA	4	4		1	2	2	50	3269	585.03	5204
23	309	113	SHELTON	4	4		1	1	2	55	3086	508.88	5678
27	83	111	UNIVERSITY PLACE	4	2		1	1	2	48	3426	558.43	4824
27	320	111	SUMNER	4	4		1	2	2	52	3263	612.79	5037
27	401	111	PENINSULA	4	5		1	3	2	65	2640	726.72	6785
27	403	111	BETHEL	4	5		1	2	1	40	4314	618.95	3857
29	101	108	SEDRO WOOLEY	4	4		1	2	2	59	2928	613.58	6467
29	320	108	MOUNT VERNON	4	4		1	3	2	54	3120	677.28	7172
31	25	109	MARYSVILLE	4	4		1	2	2	39	4520	599.86	6059
31	201	109	SNOHOMISH	4	4		1	2	2	42	3935	601.86	4853
32	354	101	MEAD	4	5		1	2	2	45	3660	619.66	6158
32	363	101	WESTVALLEY(SPOKANE)	4	4		1	2	2	44	3707	613.67	6143
38	267	101	PULLMAN	4	3		1	3	3	60	2770	696.75	7758
39	201	105	SUNNYSIDE (YAKIMA)	4	4		1	2	2	46	3626	576.21	4714
39	202	105	TOPPENISH	4	4	1	1	2	1	63	2730	628.08	4592
39	207	105	WAPATO	4	4		1	3	1	62	2736	696.67	3899
39	208	105	WESTVALLEY (YAKIMA)	4	4		1	2	2	61	2752	595.50	4664
31	6	109	MUKILTEO	4	4		2	3	3	49	3393	670.91	23667

CO	SD	ISD	NAME	SIZE GROUP	PLACE TYPE	K	HS-NHS	GROUP EXP	GROUP AV	AAE RANK	AAE	PP EXPENDITURE	PP ASSD VALUE
1	147	104	OTHELLO	5	4		1	2	2	80	2052	656.32	7914
3	116	103	PROSSER	5	4		1	2	2	86	1962	609.16	6165
6	112	112	WASHOUGAL	5	4		1	2	3	89	1748	630.29	11416
6	117	112	CAMAS	5	4		1	3	3	73	2344	673.14	16507
13	144	104	QUINCY	5	4	1	1	2	2	88	1767	659.07	7815
13	165	104	EPHRATA	5	4		1	3	2	87	1820	670.56	5537
17	402	110	VASHON ISLAND	5	5		1	2	2	90	1675	646.27	5711
17	406	110	SOUTH CENTRAL	5	2		1	3	3	72	2357	703.62	13610
17	409	110	TAHOMA	5	5		1	2	1	75	2292	651.84	4586
17	410	110	SNOQUALMIE VALLEY	5	4		1	2	2	68	2434	629.29	8860
18	303	110	BAINBRIDGE ISLAND	5	5		1	3	2	82	2019	672.39	8793
21	302	113	CHEHALIS	5	4		1	1	2	76	2099	603.96	7174
27	417	111	FIFE	5	4		1	1	1	81	2052	601.08	5300
29	100	108	BURLINGTON EDISON	5	4		1	2	2	67	2463	608.14	6713
29	103	108	ANACORTES	5	4		1	3	3	70	2386	694.00	15557
31	4	109	LAKE STEVENS	5	4		1	2	1	74	2305	606.85	5037
31	16	109	ARLINGTON	5	4		1	2	2	78	2066	642.03	6996
31	103	109	MONROE	5	4		1	3	2	84	2012	682.16	6283
32	326	101	MEDICAL LAKE	5	4		1	1	1	79	2062	531.81	1610
32	360	101	CHENEY	5	4		1	1	2	66	2489	578.99	6046
32	361	101	EAST VALLEY	5	5		1	2	3	85	1980	623.79	11428
34	33	113	TUMWATER	5	4		1	1	2	71	2371	552.74	9173
37	502	108	FERNDALE	5	4		1	2	3	69	2413	621.84	17941
39	119	105	SELAH	5	4		1	2	1	83	2016	605.71	4084
39	200	105	GRANDVIEW	5	4		1	1	1	77	2077	586.75	5189
4	122	106	CASHMERE	6	4		1	3	2	113	1051	666.91	5436
5	323	114	SEQUIM	6	4		1	2	2	105	1237	603.07	8166
5	402	114	QUILLAYUTE VALLEY	6	4		1	2	3	109	1142	634.80	9944
6	122	112	RIDGEFIELD	6	5		1	2	2	100	1340	584.65	7039
8	401	112	CASTLE ROCK	6	4		1	1	1	94	1481	554.93	4986
8	404	112	WOODLAND	6	4		1	2	3	114	1030	624.25	16949
11	51	103	NORTH FRANKLIN	6	5	1	1	3	3	102	1300	753.65	12921
14	66	113	MONTESANO	6	4		1	1	2	99	1361	490.53	6121
14	68	113	ELMA	6	4		1	2	1	98	1424	607.99	4199
16	50	114	PORT TOWNSEND	6	4		1	3	2	95	1464	666.79	9601
20	405	112	WHITE SALMON	6	4	1	1	2	1	107	1168	601.00	5282
21	303	113	WHITE PASS	6	5		1	3	3	116	1007	646.79	14888
24	19	107	OMAK	6	4		1	2	2	91	1551	609.52	6036
25	116	113	RAYMOND	6	4		1	2	3	115	1015	596.93	10308
27	416	111	WHITE RIVER	6	4		1	3	2	97	1436	679.24	6169
31	401	109	STANWOOD	6	4		1	1	3	96	1451	578.08	10412
32	414	101	DEER PARK	6	4		1	2	2	112	1060	602.78	5350
33	115	101	COLVILLE	6	4		1	1	2	93	1522	531.65	6153
34	2	113	YELM	6	5		1	2	3	106	1232	645.69	11993
37	503	108	BLAINE	6	4		1	3	2	118	1002	667.84	8703
37	504	108	LYNDEN	6	4		1	2	2	103	1299	613.31	8626
37	505	108	MERIDIAN	6	5		1	1	1	117	1003	547.69	3756
37	506	108	NOOKSACK VALLEY	6	5		1	2	2	111	1076	629.44	8056
37	507	108	MOUNT BAKER	6	5	1	1	3	2	108	1149	686.82	9313
39	3	105	NACHES VALLEY	6	5	1	1	2	2	104	1270	593.86	5846
39	90	105	MOXEE	6	5	1	1	1	1	92	1528	543.43	5185
39	204	105	GRANGER	6	4		1	2	1	110	1102	613.10	3415
27	7	111	DU PONT	6	5		2	1	1	101	1303	482.13	914
1	160	104	RITZVILLE	7	4	1	1	3	3	165	584	889.60	20928
3	52	103	KIONA BENTON	7	4		1	1	1	149	684	585.93	3597
3	53	103	FINLEY	7	5		1	3	2	176	514	737.78	13516
4	128	106	LEAVENWORTH	7	4	1	1	1	1	147	692	615.10	4837
4	129	106	CHELAN	7	4		1	2	2	124	939	637.71	7864
4	200	106	PESHASTIN-DRYDEN	7	5	1	1	2	1	175	519	624.66	5167
5	401	114	CAPE FLATTERY	7	5		1	3	3	164	589	762.86	16736
6	101	112	LA CENTER	7	5		1	2	2	178	504	641.92	7514
7	2	102	DAYTON	7	4		1	2	3	127	922	705.49	14689
8	402	112	KALAMA	7	4		1	2	3	141	746	630.30	16391
12	110	102	POMEROY	7	4		1	3	3	137	808	748.33	15251
13	55	104	GRAND COULEE	7	4		1	2	1	163	590	661.80	4518
13	146	104	WARDEN	7	4		1	3	2	160	608	816.45	9193
13	160	104	ROYAL	7	5		1	3	2	142	727	789.49	8028
14	64	113	NORTH BEACH	7	5		1	2	3	148	689	682.47	24756
14	172	113	OCOSTA	7	4		1	2	2	140	760	625.55	12428
15	204	108	COUPEVILLE	7	5		1	3	2	166	582	805.89	12701
15	206	109	SOUTH WHIDBEY	7	5		1	1	3	128	913	572.97	16690
16	49	114	CHIMACUM	7	5		1	3	2	167	577	743.00	9953
17	407	110	LOWER SNOQUALMIE	7	5		1	2	2	122	958	649.12	8312
19	404	105	CLE ELUM-ROSLYN	7	4		1	2	2	130	881	648.29	8362
20	404	105	GOLDENDALE	7	4	1	1	2	2	125	939	654.03	8050
21	206	113	MOSSYROCK	7	5		1	3	3	169	549	772.10	20293
21	214	113	MORTON	7	4		1	2	3	154	668	637.42	18429

CO	SD	ISD	NAME	SIZE GROUP	PLACE TYPE	K	HS-NHS	GROUP EXP	GROUP AV	AAE RANK	AAE	PP EXPENDITURE	PP ASSD VALUE
21	232	113	WINLOCK	7	5		1	2	1	146	692	616.51	3890
21	237	113	TOLEDO	7	5		1	2	2	151	683	634.32	12616
21	300	113	ONALASKA	7	5		1	2	2	168	551	714.31	11074
22	105	101	ODESSA	7	4	1	1	3	3	171	540	753.04	16212
23	403	114	NORTH MASON	7	5		1	2	2	138	800	681.64	11867
24	105	107	OKANOGAN	7	4		1	2	2	129	889	639.12	6427
24	111	107	BREWSTER	7	4		1	3	2	172	530	732.10	10857
24	401	107	COULEE DAM	7	4		1	3	1	150	683	754.40	3865
24	404	107	TONASKET	7	5	1	1	1	2	123	949	603.88	8431
24	410	107	OROVILLE	7	4		1	2	2	126	932	653.26	6619
25	101	112	OCEAN BEACH	7	5		1	1	3	132	864	615.98	17612
25	116	113	SOUTH BEND	7	4		1	1	2	157	651	576.75	7994
25	155	112	NASELLE GRAYS RIVER	7	5	1	1	3	3	174	525	776.37	15227
25	160	113	WILLAPA VALLEY	7	5	1	1	2	3	177	511	721.04	18515
26	56	101	NEWPORT	7	4	1	1	2	2	152	681	667.05	7637
27	344	111	ORTING	7	4		1	1	1	143	711	580.48	3754
27	404	111	EATONVILLE	7	5		1	2	2	120	990	705.84	12452
29	102	108	CONCRETE	7	5		1	3	3	173	528	763.01	20512
30	3	112	STEVENSON	7	5		1	3	2	134	845	854.91	10049
31	30	109	SULTAN	7	4		1	2	1	135	827	627.90	4838
31	330	109	DARRINGTON	7	4		1	1	1	161	608	596.27	4665
31	332	109	GRANITE FALLS	7	5		1	1	2	153	681	603.26	6994
32	362	101	LIBERTY	7	5	1	1	2	3	170	542	653.56	22582
32	416	101	RIVERSIDE	7	5		1	1	1	133	849	600.20	4377
33	36	101	CHEWELAH	7	4		1	2	1	144	702	617.46	5539
33	212	101	KETTLE FALLS	7	5		1	1	2	159	618	604.01	6250
34	401	113	ROCHESTER	7	5		1	1	1	136	827	596.65	5431
34	402	113	TENINO	7	5		1	1	2	139	773	597.00	6458
35	200	112	WAHKIAKUM	7	5		1	2	2	156	654	648.06	9435
38	300	101	COLFAX	7	4	1	1	2	2	121	989	682.58	14010
39	120	105	MABTON	7	5		1	2	1	158	651	636.41	4561
39	203	105	HIGHLAND	7	5	1	1	2	2	131	872	627.45	6565
39	205	105	ZILLAH	7	4		1	1	1	162	602	564.67	5970
39	209	105	MOUNT ADAMS	7	5		1	2	1	119	992	702.40	4593
27	1	111	STEILACOOM	7	4		2	1	2	145	697	541.38	11744
36	250	102	COLLEGE PLACE	7	4		2	2	2	155	662	684.53	12300
1	109	104	WASHTUCNA	8	5		1	3	2	238	217	916.32	14099
1	158	104	LIND	8	5	1	1	3	3	205	347	985.54	31556
2	400	102	ASOTIN	8	5		1	2	2	223	268	812.47	8154
4	19	106	MANSON	8	5	1	1	2	1	194	406	730.57	6150
4	127	106	ENTIAT	8	5		1	2	1	212	312	760.32	5890
5	313	114	CRESCENT	8	5	1	1	2	2	240	212	668.46	8682
8	130	112	TOUTLE LAKE	8	5		1	2	3	184	456	865.20	20413
9	75	106	BRIDGEPORT	8	5		1	2	1	198	377	741.05	5293
9	209	106	WATERVILLE	8	5		1	2	2	203	356	683.10	13780
10	309	101	REPUBLIC	8	5	1	1	1	1	188	435	620.39	6880
13	150	104	COULEE CITY	8	5	1	1	3	2	239	212	1000.07	10988
13	156	104	SOAP LAKE	8	4		1	2	1	185	455	690.24	5476
14	97	113	QUINAULT	8	5	1	1	2	2	197	378	674.66	9514
14	117	113	WISHKAH VALLEY	8	5		1	3	2	235	224	904.35	8601
14	400	113	OAKVILLE	8	4	1	1	2	2	208	329	677.57	7687
16	48	114	QUILCENE	8	5		1	2	1	222	274	854.29	7016
19	403	105	KITTITAS	8	5		1	2	2	189	433	792.99	9926
20	402	112	KLICKITAT	8	5		1	2	1	217	293	712.70	3939
20	406	112	LYLE	8	5		1	3	1	215	307	963.69	5587
21	14	113	NAPAVINE	8	5		1	2	1	202	357	633.49	5552
21	226	113	ADNA	8	5		1	1	2	214	310	613.50	7871
21	301	113	PE ELL	8	5	1	1	2	3	206	333	796.57	47209
22	8	101	SPRAGUE	8	5	1	1	3	3	243	206	938.98	18761
22	200	101	WILBUR	8	4		1	2	2	193	422	777.22	13671
22	204	101	HARRINGTON	8	5	1	1	3	3	234	230	974.32	28231
22	207	101	DAVENPORT	8	4	1	1	2	2	187	436	772.64	16064
22	260	101	REARDAN	8	5	1	1	2	2	196	388	846.90	17832
24	103	107	WINTHROP	8	5	1	1	2	1	224	266	734.55	5838
24	122	107	PATEROS	8	5	1	1	2	2	220	278	830.11	7503
24	403	107	TWISP	8	5		1	1	1	183	456	598.24	6105
26	59	101	CUSICK	8	5	1	1	2	2	209	327	737.46	7309
26	70	101	SELKIRK	8	5	1	1	2	2	180	483	716.80	8838
28	149	108	SAN JUAN	8	5		1	2	3	211	313	711.75	20470
29	311	108	LA CONNER	8	5		1	2	2	191	431	626.83	9539
32	358	101	FREEMAN	8	5	1	1	2	2	179	489	799.87	9807
33	207	101	MARY WALKER	8	5	1	1	2	2	228	253	805.91	8602
33	211	101	NORTHPORT	8	5	1	1	2	2	226	258	659.11	9326
34	307	113	RAINIER	8	5		1	2	2	231	237	808.81	7736
36	300	102	TOUCHET	8	5	1	1	2	3	236	219	824.15	27565
36	400	102	COLUMBIA (WAL.WAL.)	8	5	1	1	3	3	190	432	878.36	26535
36	401	102	WAITSBURG	8	5	1	1	3	2	192	422	888.40	15079

CO	SD	ISD	NAME	SIZE GROUP	PLACE TYPE	K	HS-NHS	GROUP EXP	GROUP AV	AAE RANK	AAE	PP EXPENDITURE	PP ASSD VALUE
36	402	102	PRESCOTT	8	5	1	1	3	3	232	235	1223.22	52090
38	244	101	OAKESDALE	8	5		1	3	3	233	231	939.71	20905
38	260	101	LACROSSE	8	5	1	1	3	3	227	255	1018.14	21850
38	265	101	TEKOA	8	5	1	1	2	2	221	276	819.69	12213
38	301	101	PALOUSE	8	5		1	2	2	200	369	681.40	8693
38	302	101	GARFIELD	8	5		1	3	2	230	245	893.13	12968
38	306	101	COLTON	8	5	1	1	3	3	237	218	1041.00	19362
38	320	101	ROSALIA	8	5	1	1	3	2	216	300	899.35	15408
38	322	101	ST. JOHN	8	5	1	1	3	3	201	367	908.22	24742
6	98	112	HOCKINSON	8	5		2	1	1	186	446	585.96	5793
6	104	112	YACOLT	8	5		2	1	2	242	209	563.26	8779
8	82	112	ROSE VALLEY	8	5	1	2	1	1	241	212	515.78	6254
14	65	113	MCCLEARY	8	4		2	1	1	218	284	490.58	7001
14	99	113	COSMOPOLIS	8	4		2	2	3	210	315	669.22	34376
17	190	110	BLACK DIAMOND	8	4		2	1	1	229	251	568.22	5824
23	404	113	HOOD CANAL	8	4		2	1	3	195	402	567.09	19260
27	343	111	DIERINGER	8	4		2	1	2	213	310	622.16	11541
29	317	108	CONWAY	8	4		2	1	2	204	349	583.65	9006
30	301	112	CARSON	8	5		2	2	2	207	331	816.57	8076
31	109	109	CATHCART	8	5		2	1	1	199	375	501.75	4204
31	306	109	LAKEWOOD	8	5		2	1	2	182	457	591.90	7186
34	324	113	GRIFFIN	8	5		2	1	3	219	281	533.82	19037
34	332	113	LITTLEROCK	8	5		2	1	2	225	263	613.49	9392
39	2	105	UNION GAP	8	4		2	1	2	181	462	568.93	8608
2	310	102	ANATONE	9	5	1	1	3	2	283	76	1525.87	25865
9	207	106	MANSFIELD	9	5	1	1	2	2	258	142	1015.61	15284
10	50	101	CURLEW	9	5	1	1	2	1	256	156	771.03	6607
10	70	101	INCHELIUM	9	5	1	1	2	1	244	198	791.77	5945
11	56	103	KAHLOTUS	9	5	1	1	3	2	272	104	1501.89	40747
13	128	104	HARTLINE	9	5		1	2	2	268	115	975.14	22751
13	167	104	WILSON CREEK	9	5	1	1	2	2	264	131	1103.48	18989
17	195	110	LESTER (3RD CLASS)	9	5	1	1	3	3	310	22	2779.83	166393
17	404	110	SKYKOMISH	9	5	1	1	2	2	266	120	1105.61	23626
19	28	105	EASTON	9	5		1	2	2	269	108	1048.02	37626
19	400	105	THORP	9	5	1	1	2	2	254	167	775.49	12904
20	94	112	WISHRAM	9	5	1	1	2	1	265	124	1088.24	5734
20	203	105	BICKLETON	9	5	1	1	2	2	271	104	994.99	26220
20	400	112	TROUT LAKE	9	5	1	1	2	1	252	167	777.12	5893
20	401	112	GLENWOOD	9	5	1	1	2	1	260	140	963.62	10201
21	234	113	BOISTFORT	9	5	1	1	2	2	262	139	961.50	22756
22	17	101	ALMIRA	9	5	1	1	2	2	255	163	959.09	22469
22	73	101	CRESTON	9	5	1	1	2	2	250	178	936.36	15348
23	311	113	MARY M. KNIGHT	9	5	1	1	2	2	253	167	842.11	12332
25	200	113	NORTH RIVER	9	5	1	1	2	2	278	82	1040.82	28738
28	137	108	ORCAS ISLAND	9	5	1	1	2	2	249	179	890.39	19230
28	144	108	LOPEZ ISLAND	9	5	1	1	2	2	275	96	989.24	46166
33	49	101	WELLPINIT	9	5	1	1	2	1	259	140	836.31	3395
33	206	101	COLUMBIA (STEVENS)	9	5	1	1	2	1	245	193	864.73	7460
38	264	101	LAMONT	9	5	1	1	3	3	296	52	1500.88	67550
38	308	101	ENDICOTT	9	5	1	1	2	2	246	191	1228.72	32208
1	122	104	BENGE	9	5	1	2	3	3	319	14	1958.01	120555
3	50	103	PATERSON	9	5	1	2	3	3	318	14	2214.14	131392
4	69	106	STEHEKIN	9	5	1	2	3	2	325	5	1274.61	26016
5	321	114	FAIRVIEW	9	5	1	2	1	2	284	76	718.44	17977
6	103	112	GREEN MOUNTAIN	9	5	1	2	1	2	297	51	575.20	19596
7	35	102	STARBUCK	9	5	1	2	3	3	298	44	1525.71	55435
8	118	112	CARROLLS	9	5	1	2	1	2	257	145	533.52	11936
9	13	106	ORONDO	9	5	1	2	1	2	286	72	652.75	15249
9	102	106	PALISADES	9	5	1	2	3	3	312	17	1371.63	71706
04	9	106	MONITOR	9	5	1	2	1	1	261	139	606.46	9179
10	3	101	KELLER	9	5	1	2	2	2	304	33	1080.05	12400
10	60	101	HAZELMERE	9	5	1	2	3	3	323	7	1961.27	49253
10	65	101	ORIENT	9	5	1	2	1	1	279	78	730.82	10975
11	54	103	STAR	9	5	1	2	3	3	324	6	4666.82	168978
13	73	104	WAHLUKE	9	5	1	2	1	1	291	64	643.78	7243
14	77	113	TAHOLAH	9	5		2	2	2	270	106	937.23	16148
14	104	113	SATSOP	9	5	1	2	1	2	289	67	406.87	12651
16	20	114	CLEARWATER	9	5	1	2	2	3	290	65	1188.19	67978
16	46	114	BRINNON	9	5	1	2	2	2	300	44	850.65	35978
19	7	105	DAMMAN	9	5	1	2	3	3	322	8	1493.77	107705
20	215	112	CENTERVILLE	9	5	1	2	2	2	287	69	746.66	23506
20	403	112	ROOSEVELT	9	5	1	2	3	3	313	16	2052.61	50606
21	18	113	VADER	9	5		2	1	1	263	133	505.64	8183
21	36	113	EVALINE	9	5	1	2	1	1	299	44	484.59	8119
22	5	101	EDWALL	9	5	1	2	2	2	292	63	1065.37	42779
23	42	113	SOUTHSIDE	9	5		2	1	1	247	188	432.74	8305
23	54	113	GRAPEVIEW	9	5	1	2	1	3	294	59	613.30	75768
23	401	113	KAMILCHE VALLEY	9	5	1	2	1	1	282	77	466.03	10714

				SIZE	PLACE		HS-	GROUP		AAE		PP EXP-	PP ASSD
CO	SD	ISD	NAME	GROUP	TYPE	K	NHS	EXP	AV	RANK	AAE	ENDITURE	VALUE
23	402	113	PIONEER	9	5		2	1	2	248	183	577.76	34235
24	14	107	NESPELEM	9	5		2	2	1	251	170	890.57	4095
24	118	107	RIVERSIDE	9	5	1	2	1	1	276	89	649.45	9389
27	24	111	ANDERSON ISLAND	9	5	1	2	2	3	306	27	795.23	59188
27	406	111	CARBONADO	9	5		2	1	2	280	78	700.76	24306
28	10	106	SHAW	9	5	1	2	3	3	326	2	2882.20	142576
30	2	112	SKAMANIA	9	5	1	2	2	2	285	73	1118.36	35414
30	29	112	MOUNT PLEASANT	9	5	1	2	3	2	309	22	1314.97	30727
30	31	112	MILL A	9	5	1	2	2	1	281	78	1131.86	9496
31	63	109	INDEX	9	5	1	2	2	2	315	16	906.15	30412
31	84	109	GOLD BAR	9	5		2	1	1	267	117	677.23	7292
32	123	101	ORCHARD PRAIRIE	9	5	1	2	1	1	295	55	413.44	8587
32	312	101	GREAT NORTHERN	9	5	1	2	3	3	320	11	1299.16	60590
32	325	101	NINE MILE FALLS	9	5	1	2	1	2	274	99	684.93	14711
33	18	101	MILL CREEK	9	5	1	2	2	2	311	20	779.66	20716
33	27	101	BLUE CREEK	9	5	1	2	1	2	314	16	444.37	10454
33	30	101	ONION CREEK	9	5	1	2	2	3	321	9	882.63	75166
33	50	101	MARCUS	9	5	1	2	1	1	277	85	642.94	6897
33	70	101	VALLEY	9	5	1	2	2	2	273	102	734.71	17020
33	183	101	LOON LAKE	9	5	1	2	2	3	303	39	743.18	53997
33	202	101	SUMMIT VALLEY	9	5	1	2	1	2	305	33	435.62	17789
33	205	101	EVERGREEN	9	5	1	2	1	2	306	23	571.20	39981
36	101	102	DIXIE	9	5	1	2	2	2	302	41	1058.13	39796
37	100	108	NEWHALEM	9	5	1	2	2	1	288	68	1026.97	25
37	105	108	DIABLO	9	5	1	2	3	1	301	41	1273.58	2543
38	180	101	FARMINGTON	9	5	1	2	3	3	317	14	2077.81	54215
38	226	101	HOOPER	9	5	1	2	3	3	307	25	1323.12	59858
38	304	101	STEPTOE	9	5	1	2	2	2	293	61	771.06	28378
38	310	101	HAY	9	5	1	2	3	3	316	15	2975.95	167298

Section 2

PER-PUPIL EXPENDITURE PATTERNS

Introduction

The cost per pupil usually quoted to characterize the per-pupil expenditure is the net cost ($502,560,723)per pupil in average annual enrollment (758,778) in the "K-12 Program." This figure was $662.33 for the 1968-69 school year. When net expenditure for the K-12 program was divided by the average annual enrollment in each school district, the median per-pupil expenditure was $669. This means that half of the school districts had a per-pupil expenditure below this value. When the state-wide total appropriation expenditure ($577,685,887) was divided by the average annual enrollment, the cost per pupil was increased by about $100, to $761. A more appropriate number of pupils for total cost is the total base enrollment, which was 771,759 full-time equivalent students. Using this as the denominator, the measure of the total cost per pupil state-wide was $749. The state's present funding formula uses "weighted students" based on various factors. These weighting factors added 207,871 "students" to the total base enrollment for purposes of apportionment of state funds. Using the total weighted enrollment, 979,630, the net cost per pupil was $487 and the total cost was $590.

For the purposes of this study, the most meaningful measure of per-pupil expenditure is the $749 cost obtained using the total appropriated expenditure and the total base enrollment.

The above gross statistics for 1968-69 are no longer of much interest in themselves. However, the detailed analysis of how these statistics,and how the per-pupil cost for programs and specific items which make up the total per-pupil cost, vary among the various size groups and within the size group *is* of interest. This analysis does provide insights which can be expected to remain valid for the current and following years.

Conclusions

The initial analysis of the net per-pupil expenditures for the elementary, secondary, and K-12 programs revealed a broad range of per-pupil expenditure, both within and among size groups. State-wide, per-pupil costs for the K-12 program varied from $407 to $4,667, a range of $4,260. Eighty percent of the school districts in the state fell within the $520 range between $560 and $1,080, and 50 percent fell within $200 of each other–between $600 and $800. The median per-pupil expenditure was $669 and the average $662. The median expenditure for the size groups varied from a high of about $705 in districts with more than 10,000 students, maintained a low of about $610 for the districts with between 1,000 and 5,000 pupils, and jumped to $950 for districts with fewer than 200 students. Districts with more than 1,000 pupils had a $300 over-all range, and 80 percent of these 116 districts fell within the $150 range from $550 to $700. None of the 133 high school districts with fewer than 1,000 pupils spent less than $550 per pupil, about a third fell in the $550-$700 range, and nine spent more than $1,060. About one fourth of the 76 nonhigh districts fell in the $550-$700 range. Nonhigh districts contributed most to the variability of the state-wide per-pupil costs, with 15 districts spending less than $550 and 41 districts spending more than $700 per pupil

The net per-pupil costs for the elementary and secondary programs follow the same general pattern. The difference between the state-wide averages for the elementary ($576) and secondary ($693) was $117, which would indicate a secondary weighting factor of 0.2 instead of the 0.3 presently used in the funding formula.

The net per-pupil costs calculated above provide adequate comparisons of relative expenditures in the school districts. However, they are contaminated by the proration into them of about $200 per pupil from an "undistributed" account. When these undistributed costs were prorated back out, a 60 percent reduction in the range of the net per-pupil cost size group averages was obtained. These adjusted per-pupil costs are roughly equivalent to the cost of teaching and textbooks. The average for the elementary program was $361 with a range of size group averages from $300 to $430. For the secondary program, the average was $506 with a range from $490 to $674. The difference between the average costs of the elementary and secondary programs was $145, indicating a secondary weighting factor of 0.4.

The variability in the direct costs for teaching and textbooks is almost completely explained by the variability in the per-pupil cost of teachers' salaries. The additional variability in the unadjusted per-pupil costs for the remaining expenditures, which were classified as indirect, was found to be due to the following factors:

1. Transportation costs were the major cause of the increase in per-pupil costs observed in the smaller (less than 1,000 pupils) school districts.
2. School-level costs (principals, library, counseling, extracurricular) were the major cause of the increased costs in the larger school districts.
3. Maintenance and operation costs contributed to increases at both ends of size-group classification.
4. The cost of instructional specialists and aides at the school district level was a secondary cause of the increased costs observed in the larger school districts.

In summary, the major cause of variability in the observed net per-pupil costs was the variability in classroom teachers' salaries. Additional increments to per-pupil costs were caused by the indirect costs at the school level, by instructional specialists for the larger districts, and by transportation and maintenance in the smaller districts.

Summary of Results

A. Elementary, Secondary and K-12 Program—Net Per-Pupil Costs

The over-all picture for the per-pupil (in average annual enrollment, AAE) cost of the K-12 program is given in Figure 1 and Table 1. The medians follow the "tilted dish-shaped" curve characteristic of all gross measures of per-pupil cost when plotted across the size groups. Variability, as measured by the interquartile range defined by the shaded area of the size-group bar, was smallest for size group 3, increased slowly through size group 6, then doubled itself in each of the last three size groups. When groups 1 and 2 were combined, to give 15 school districts, the more meaningful statistics obtained were: lower quartile (Q25)—$660, median—$705, upper quartile (Q75)—$725, for an interquartile range of $65.

Another method of demonstrating the variability of the per-pupil costs of the K-12 program in the school districts across the state is provided in Table 2 and the Figures 2-6. Figure 2 is a cumulative polygon giving the percentage of the 325 operating school districts which have per-pupil expenditures less than the dollars per pupil given along the horizontal axis. For example, 10 percent (or about 32) of the school districts spend less than $560 per pupil, 25 percent less than $605, 75 percent less than $797, and 10 percent spend more than $1,080. Figure 3 is a frequency histogram giving the percentage of school districts whose per-pupil expenditure falls in the intervals defined by the horizontal axis. Note how the frequencies rapidly approach the mode at the interval about $625, becoming more gradual toward the maximum expenditure of $4,667.

Figure 4 shows how the 116 school districts with more than 1,000 pupils (groups 1-6) compare with the state picture. Again the modal interval is $600-$650, but the observed range extends between $450 and $800. Fourteen of these 116 school districts spent less than $560, and none spent more than $786. Figure 5 gives the picture for the 133 high-school districts enrolling fewer than 1,000 pupils. The modal interval again contained $625, but the low range was extremely abrupt and the high range flat and extended. No school district in this group spent less than $560, and nine spent more than $1,060 per pupil. The histogram provided by the nonhigh school districts was almost uniform, with the modal interval of $550-$600 accounting for only 13 percent of the 76 school districts in this group. Fifteen spent less than $560, and 21 spent more than $1,060.

All 21 nonhigh school districts which exceeded the state-wide 90th percentile of $1,060 were in size group 9 and had fewer than 80 pupils. On the average, these 21 districts have an enrollment of 28, a per-pupil expenditure of $1,402 and a per-pupil assessed valuation of $48,609. (Corresponding state-wide averages are: pupils—2,320, expenditure—$662, and valuation, $8,225.) These figures can be put in the perspective of the state-wide statistics by pointing out that the total assessed valuation of these districts for the 1970 collection year was $28.4 million, which was 0.4 percent of the state total; total per-pupil expenditures were 0.16 percent of the state total; and the 583 pupils account for 0.07 percent of the state total.

The 15 nonhigh-school districts which fell short of the state-wide tenth percentile of $560 were composed of one district from group 6 (DuPont $482), one from group 7 (Steilacoom, $541), four from group 8, and nine from group 9. The four districts in group 8 had an average enrollment of 288 pupils,

Table 1

K-12 PROGRAM
NET PER-PUPIL COST BY SIZE GROUP
(Dollars)

Size Group	Min.	Q_{25}	Median	Q_{75}	Max.	Interquartile Range
1	$625	$658	$693	$722	$726	$ 64
2	578	626	705	747	786	121
3	536	603	629	657	739	54
4	509	569	601	632	727	63
5	532	605	629	665	704	60
6	482	580	609	647	754	67
7	541	616	649	729	890	113
8	491	626	741	872	1,223	247
9	407	735	948	1,240	4,667	505
State Average	$407	$605	$669	$797	$4,667	$192

Figure 1

RANGE, INTERQUARTILE RANGE AND MEDIAN OF NET PER-PUPIL EXPENDITURE FOR K-12 PROGRAM BY SIZE GROUP

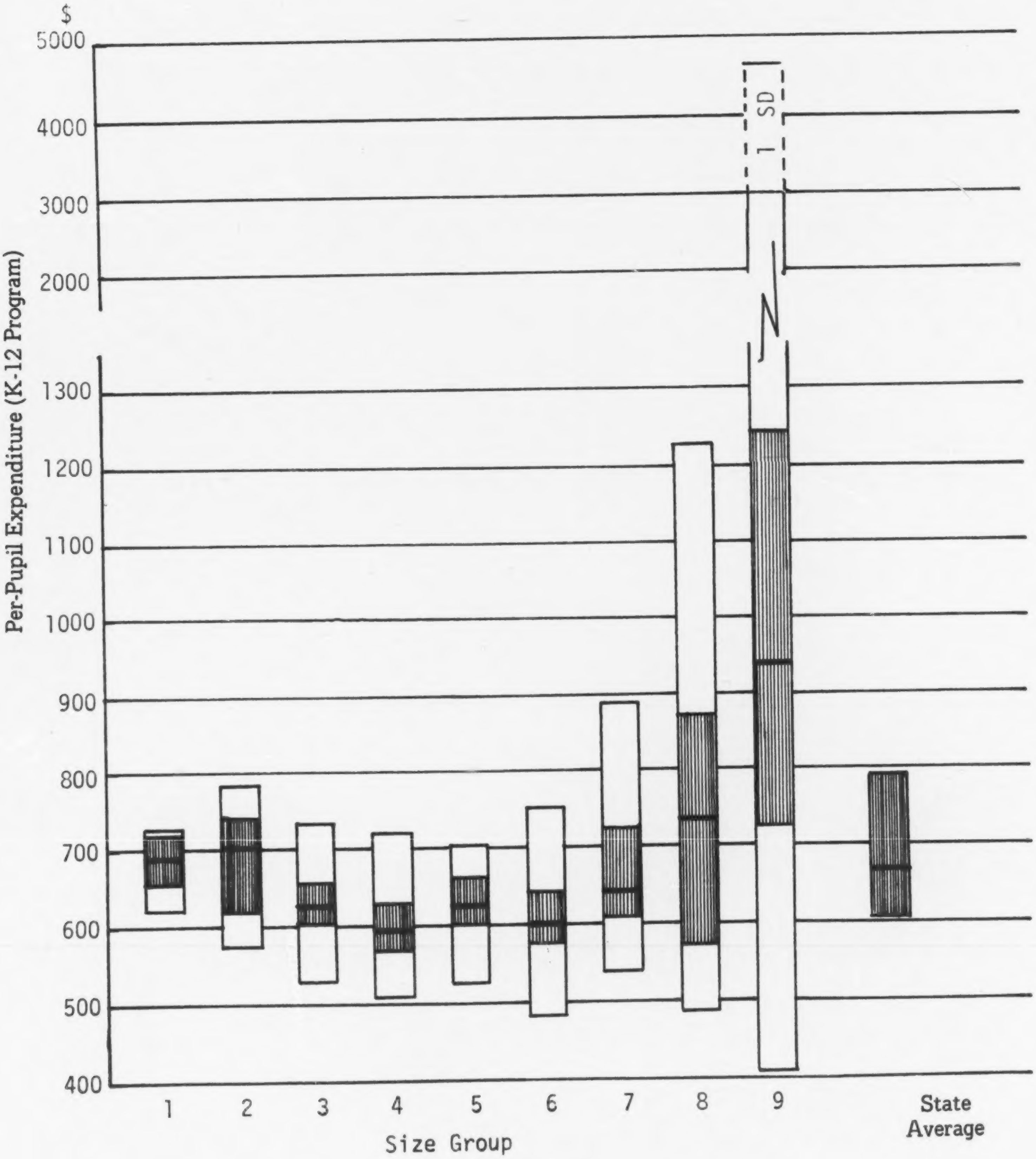


Table 2

FREQUENCY DISTRIBUTION OF SCHOOL DISTRICTS PER-PUPIL EXPENDITURE BY SIZE CLASSIFICATIONS

	Size Group			
Expenditure Range	1-6 >1000	High School 7-9 <1000	Nonhigh School 7-9 <1000	State Average 1-9
$ 400-449			5	5
450-499	1		3	5
500-549	10		6	16
550-599	22	9	10	41
600-649	44	26	7	77
650-699	26	15	5	47
700-749	10	16	6	32
750-799	3	17	3	23
800-849		11	1	12
850-899		10	3	13
900-949		6	2	8
950-999		9		9
$ 1,000-1,199**		9	7	16
1,200-1,499**		2	7	9
1,500-1,999**		2	4	6
2,000-2,999**		1	5	6
3,000-5,000**			1	1
No. of School Districts	116	133	75*	326

---

*Does not include Mukilteo (in group 4) nor DuPont (in group 6), although these districts are included in state column.

**Note change in width of interval.

Figure 2

CUMULATIVE PERCENTAGE OF SCHOOL DISTRICTS K-12 EXPENDITURES
(Note change in width of interval)

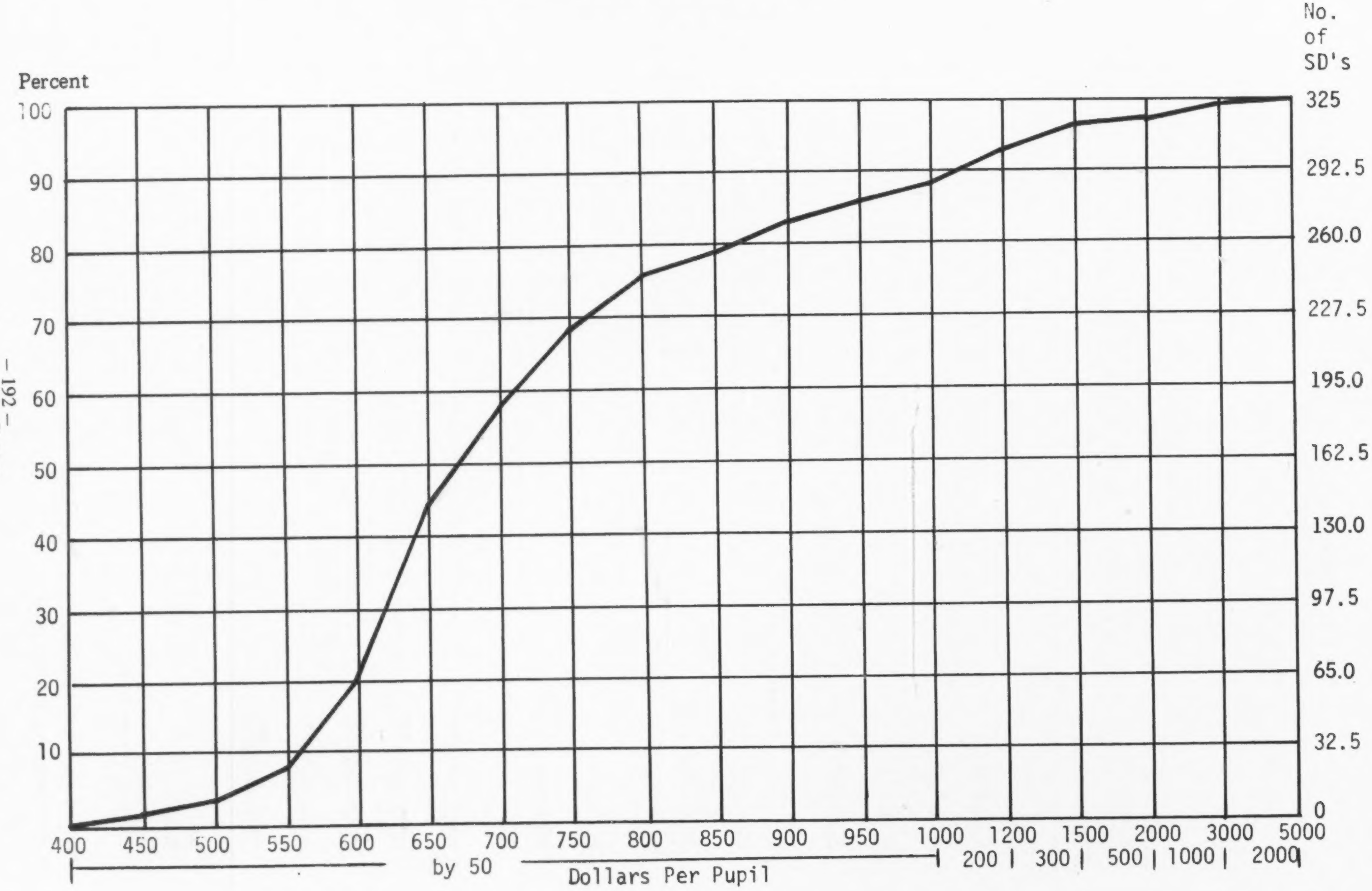


Figure 3

FREQUENCY HISTOGRAM FOR K-12 EXPENDITURES - 325 SCHOOL DISTRICTS
(Note change in width of interval)

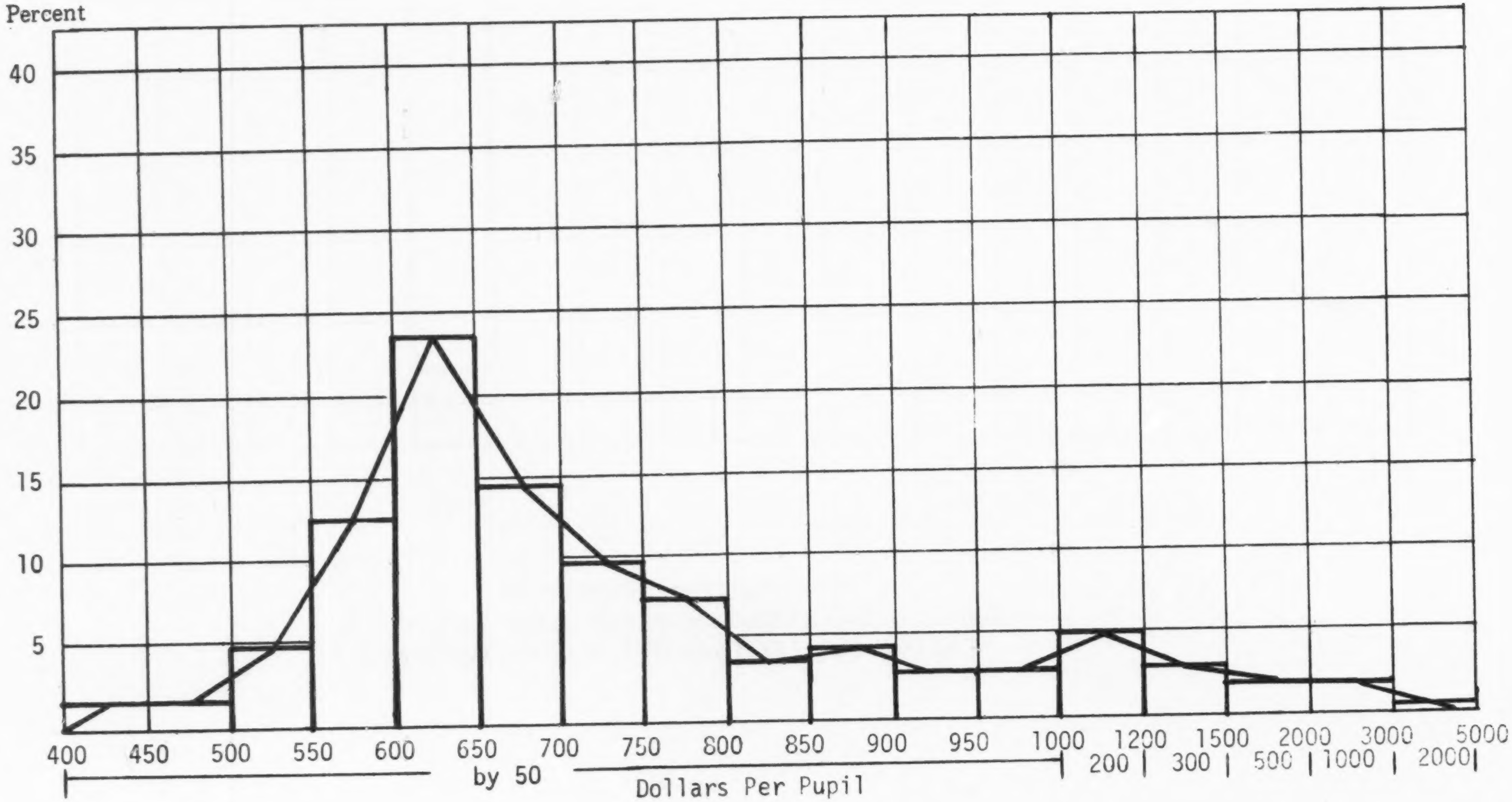


Figure 4

FREQUENCY HISTOGRAM FOR K-12 EXPENDITURES
116 SCHOOL DISTRICTS WITH MORE THAN 1000 PUPILS
(Note change in width of interval)

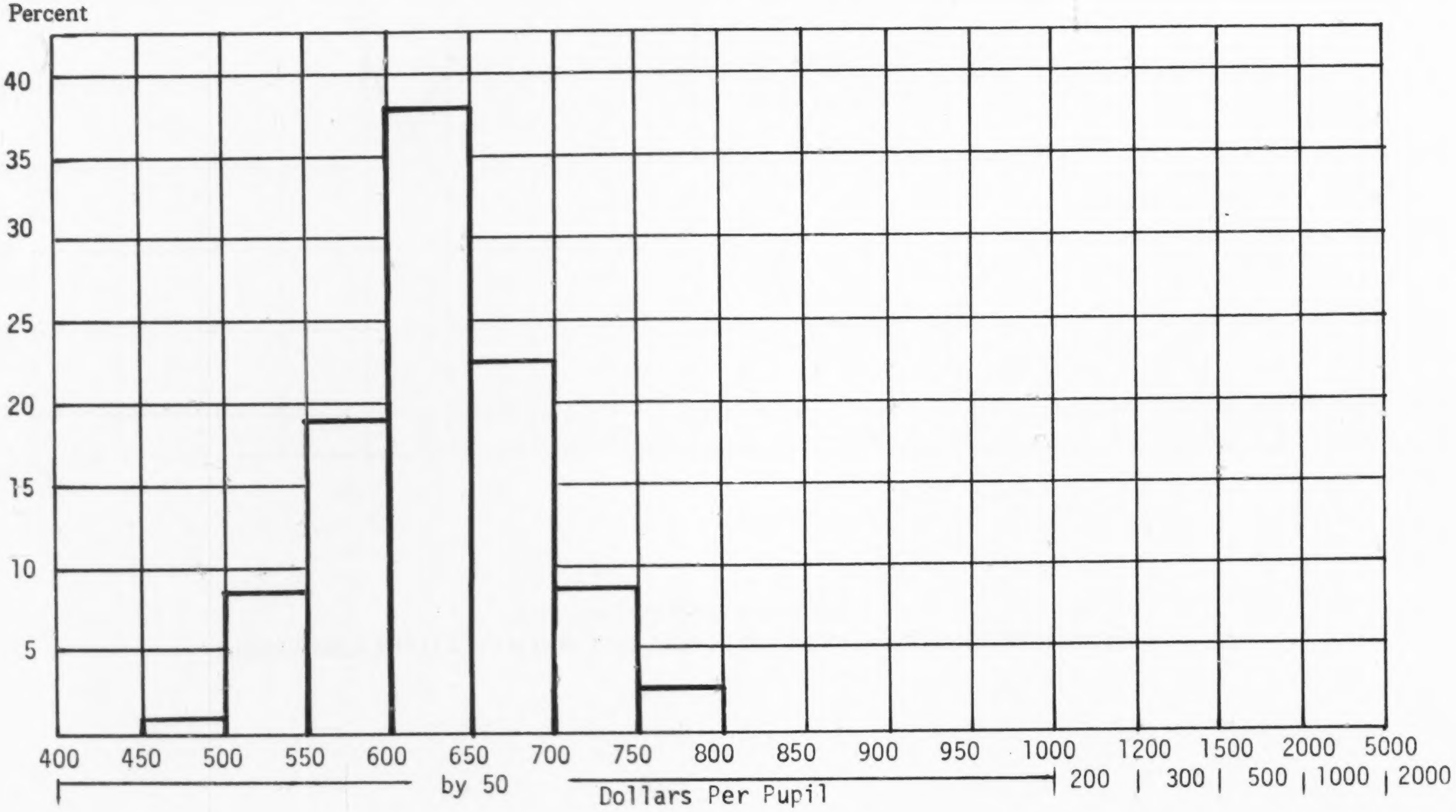


Figure 5

FREQUENCY HISTOGRAM FOR K-12 EXPENDITURES
133 HIGH SCHOOL DISTRICTS WITH FEWER THAN 1,000 PUPILS
(Note change in width of interval)

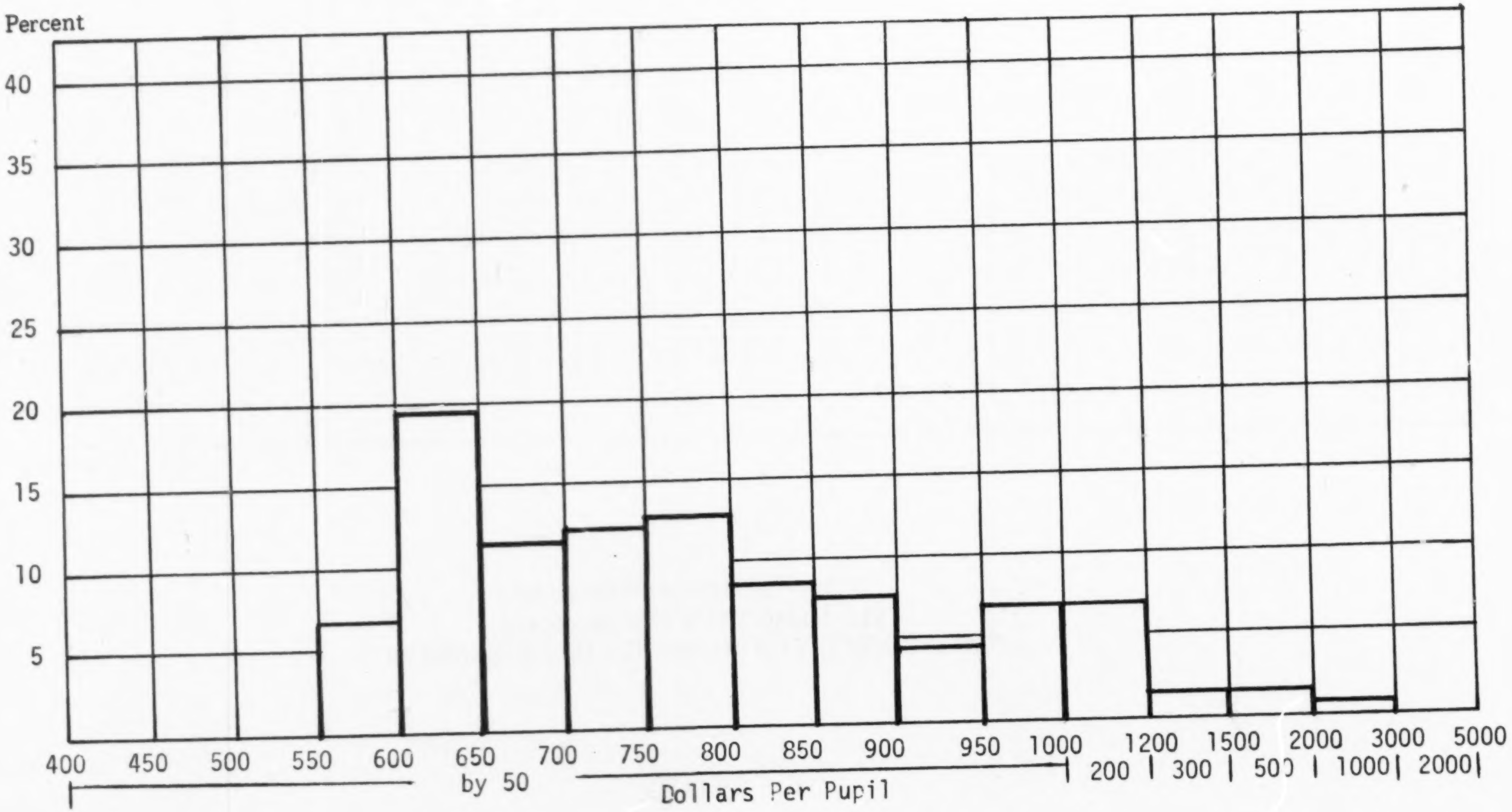
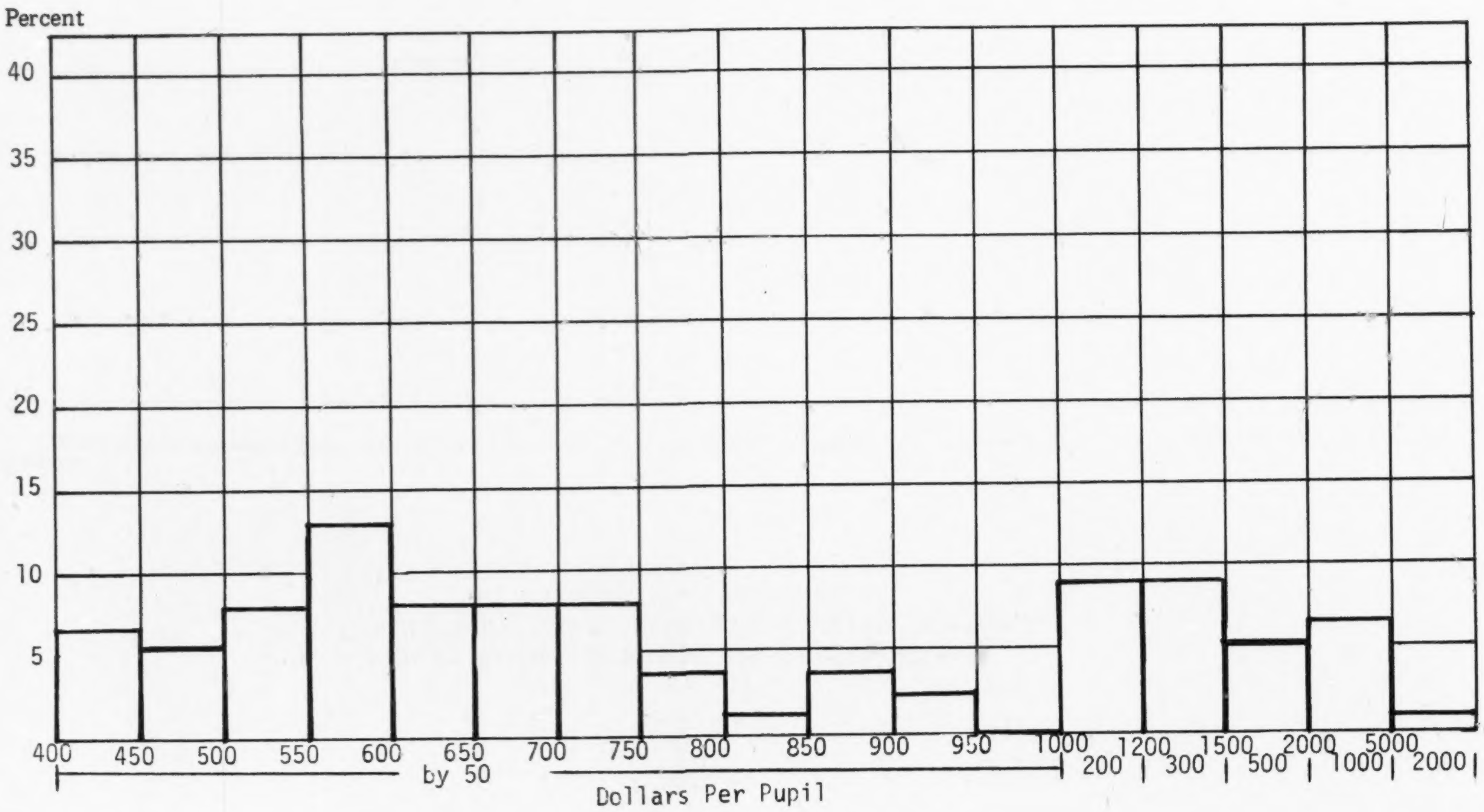


Figure 6

FREQUENCY HISTOGRAM FOR K-12 EXPENDITURES
76 NONHIGH SCHOOL DISTRICTS

(Note change in width of interval)



average per-pupil expenditure of $510 and average assessed valuation of $8,896 per pupil. The averages for the nine districts in group 9 were 85 students, $468 expenditure, and $10,075 assessed valuation per pupil.

The 14 high school districts with less than a $560 per-pupil expenditure were composed of three districts from group 3, four from group 4, two from group 5, and five from group 6. The minimum per-pupil expenditure for these districts was $491 (in Montesano) and the average was $540. The minimum per-pupil assessed valuation was $1,611 (in Medical Lake, which has other major revenue sources), and the next smallest was $3,757; the average was $5,664, about $3,000 below the state median. A low tax base seems to be the major contributing factor to the low per-pupil expenditure for the 14 high-school districts which spent less than $560 per pupil in 1968-69.

In summary, the results of this analysis of per-pupil costs for the K-12 program (which accounted for about 87 percent of the total appropriation expenditure for 1966-69) are:

- Even for high school districts with more than 1,000 pupils, there was a $300 over-all range of per-pupil expenditure, although about 80 percent fell within the $150 range from $550 to $700.
- High school districts with fewer than 1,000 pupils placed little more than a third (37.6 percent) in the $550 to $700 range. None of the 25 high-school districts with fewer than 200 students spent less than $770, and ten spent more than $1,000 per pupil. None of these 133 small high-school districts spent less than $550 per pupil.
- The 76 nonhigh school districts placed only 20 school districts, about one fourth, in the $550 to $700 range. Twenty percent (15 districts) spent less than $550 and the remaining 54 percent (41 districts) spent more than $700 per pupil.
- The 21 nonhigh school districts with more than a $1,060 per-pupil expenditure have an average assessed valuation 8 times the state average.
- Of the 15 nonhigh districts with expenditures less than $550, nine had per-pupil assessed valuations below the 25th percentiles for their respective group, five fell in the interquartile range and one was above the 75th percentile. None of these districts receive extra remote and necessary elementary funds.

Table 3 and Figure 7 compare the arithmetic averages of the net per-pupil (AAE) cost of the elementary, secondary, and K-12 programs. The plots of the elementary and secondary average costs follow the same pattern as the K-12 medians of Figure 1 through the high school districts. The last column of Table 3 gives the ratio of the difference (secondary less elementary) to the elementary costs. It is apparent that this ratio is much closer to 0.2 than the 0.3 weighting factor now used for secondary students in the apportionment formula.

The average elementary costs in the nonhigh districts are lower than in the high school districts of groups 7, 8, and 9 by $33, $111 and $59 per pupil, respectively, but on the average they are $37 above the state high-school district average. The cost of the secondary program (less than a full high school program) in group 8 was only $30 more than the elementary program and dropped $85 below the elementary program in group 9. No explanation of this apparent anomaly is presently available, although one might conjecture that those districts in group 9 which did provide instruction for grades 7 to 10 were mainly those with lower per-pupil costs.

The main implication of this comparison of elementary versus secondary is the negative one that the explanation of the increased costs does not lie in the differences in the relative costs among size groups of the elementary and secondary programs. Since the costs for these programs, when taken from SPI Form A-57-III, have usually been calculated by including dollars prorated from an "undistributed" account, differences would not be apparent. This account distributes about $200 per pupil between the programs for purposes of determining per-pupil costs.

Table 4 and Figure 8 give the results when these undistributed costs are removed from the elementary and secondary programs. The average of the elementary and secondary costs thus obtained are roughly equivalent to the direct costs of teaching and textbooks as given on SPI Form A-57-II, Functions 25 and 26.

Figure 8 still reveals a dish-shaped curve for the elementary and secondary programs. The curves are flatter and the tails not as far from the minima at group 6. The plot of the average per-pupil cost of teaching and textbooks shifted from being more heavily weighted towards the secondary program in the larger districts to a heavier weight for the elementary program in the smaller districts. Using these adjusted figures, the state-wide ratio of the secondary minus elementary difference to the cost of elementary was 0.4. The differences between the net cost computed from the A-57 figures and that computed from the adjusted figures were $214 for the elementary program and $187 for the secondary. This represents a 37 percent reduction in the estimate of the cost of the elementary, and a 27 percent reduction for the secondary program.

Table 3

AVERAGE NET PER-PUPIL COST

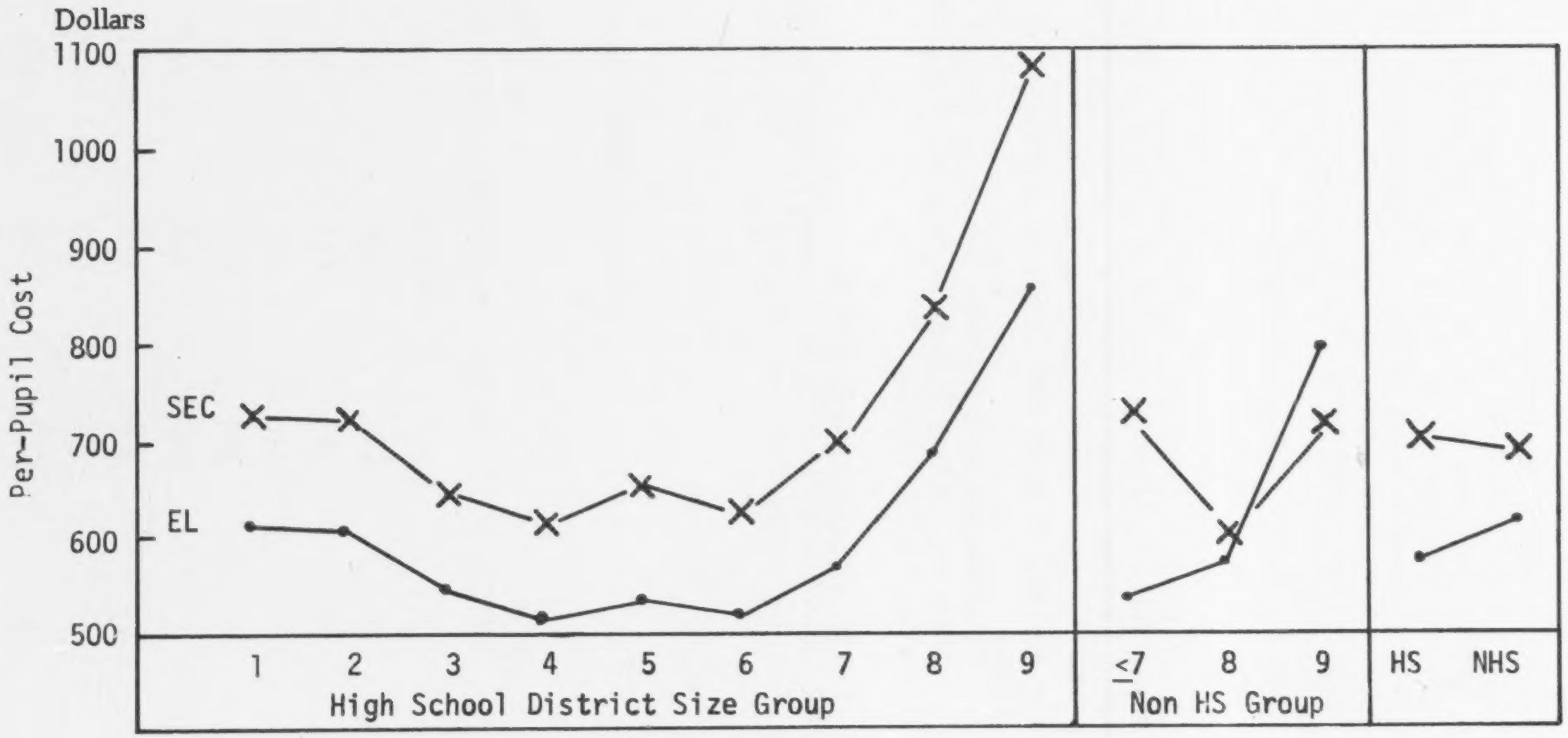
Size Group	Elementary	Secondary	K-12	(Secondary-Elementary) Elementary
	High School Districts			
1	$ 609	$ 722	$ 696	$ .186
2	608	720	689	.184
3	543	640	626	.236
4	518	613	605	.183
5	534	652	629	.220
6	517	626	607	.211
7**	568	697	669	.227
8**	682	833	794	.221
9**	856	1097	991	.281
State High School	$ 575	$ 693	$ 662	$ .205
	Nonhigh School Districts			
7*	$ 535	$ 723	$ 617	$ .351
8	571	600	588	.051
9	797	712	786	-.106
State Nonhigh School Average	$ 612	$ 688	$ 646	$ .124
Total State Average	$ 576	$ 693	$ 662	$ .203

*** Over-all K-12 averages for groups 7, 8 and 9 were $667, $746, $891 respectively.**

**** Includes 1 school district in group 4 (Mukilteo) and 1 in group 6 (DuPont).**

Figure 7

PER-PUPIL COST OF ELEMENTARY AND SECONDARY PROGRAMS
SIZE GROUP AVERAGES



The implication to be drawn here is that removing the indirect costs distributed into these programs reduces the range of the per-pupil cost size group averages by about 60 percent in each of the programs. This leaves two tasks: first, to determine which variables will further account for the variability in the K-12 program costs; and second, to determine which indirect costs caused the large variability in the original (A-57) estimates of per-pupil costs.

B. Teaching and Other Expenditures

Since the elementary and secondary per-pupil program costs follow the same pattern as the total costs, whether estimated by the K-12 program averages or medians, or by the cost of teaching and textbooks, the following discussion does not distinguish between elementary and secondary costs. Rather, a distinction is made between the direct cost of teaching, as estimated by the "Teaching Function" (SPI Form A-57-1, Part II, Function 25), and the indirect costs, as estimated by the total expenditure minus the teaching costs—called "Other" in Table 5. These per-pupil costs were calculated using total base enrollment (TBE).

Table 5 gives the per-pupil costs for various objects of expenditure broken down into Teaching and Other. The salaries of teaching certificated staff closely parallel the direct costs of teaching and textbooks. (See Figure 9.) Except for the higher employee benefit packages in groups 1, 2, and 9, the relatively high cost of professional and technical staff in group 1, and the high cost of secretarial and craft staff in groups 6 and 9 (see Table 5, "Teach" column,) the objects of expenditure for the teaching function are quite consistent. Thus, we can conclude that the cause of the variability in the direct costs is mainly due to the differential in average teacher salaries. (See Figure 9.)

The per-pupil costs for the objects of expenditure shown in Table 5 under the "Other" columns indicate that

1. Secretarial and craft staff were high for groups 1, 2, 8, and particularly 9.
2. There was a steady increase in the per-pupil cost of supplies and materials, going from $33 in group 1 to $73 in group 9.
3. There was a steady increase in the cost of contractual services, for size groups 7, 8, and 9 with $56, $78, and $160 respectively.

The pattern in items 1, 2, and 3 above indicates where the indirect costs contribute to the broad range of the net per-pupil cost taken from the SPI calculation of per-pupil expenditure (in A-57, Part III).

Table 4

ADJUSTED PER-PUPIL COSTS

Size Group	Elementary	Secondary	Teaching and Textbooks	(SEC-EL) EL	Per-cent Reduction EL	Per-cent Reduction SEC
1	$ 382	$ 529	$ 486	$ .385	37 %	27 %
2	375	528	467	.408	38	27
3	341	487	421	.428	37	24
4	326	473	398	.451	37	23
5	323	490	410	.517	40	25
6	298	468	402	.570	42	25
7	324	513	411	.583	43	26
8	357	570	436	.597	47	32
9	429	674	566	.571	50	39
State Average	$ 361	$ 506	$ 437	$ .402	37 %	27 %

Figure 8

ADJUSTED PER-PUPIL COSTS OF ELEMENTARY, SECONDARY AND TEACHING AND TEXTBOOKS–SIZE GROUP AVERAGES

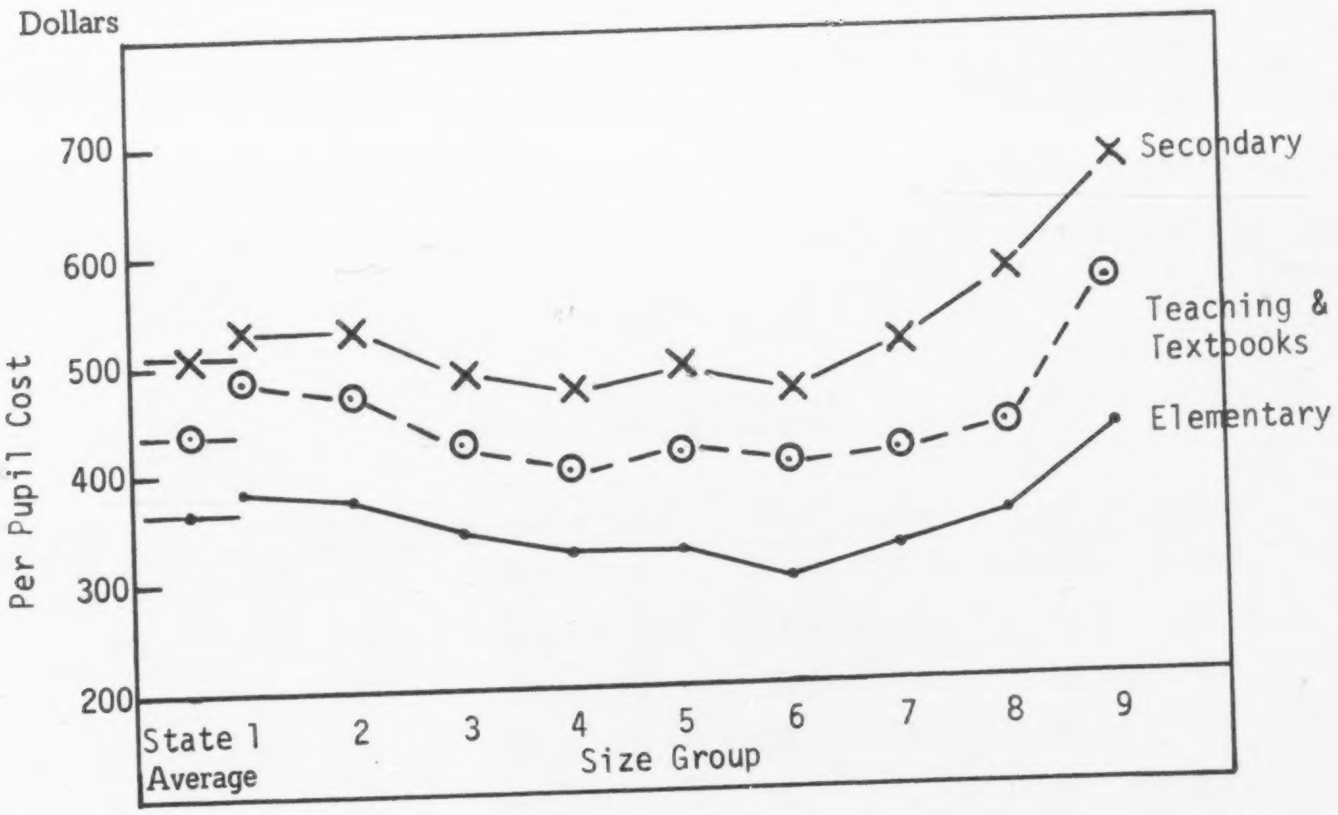


Table 5

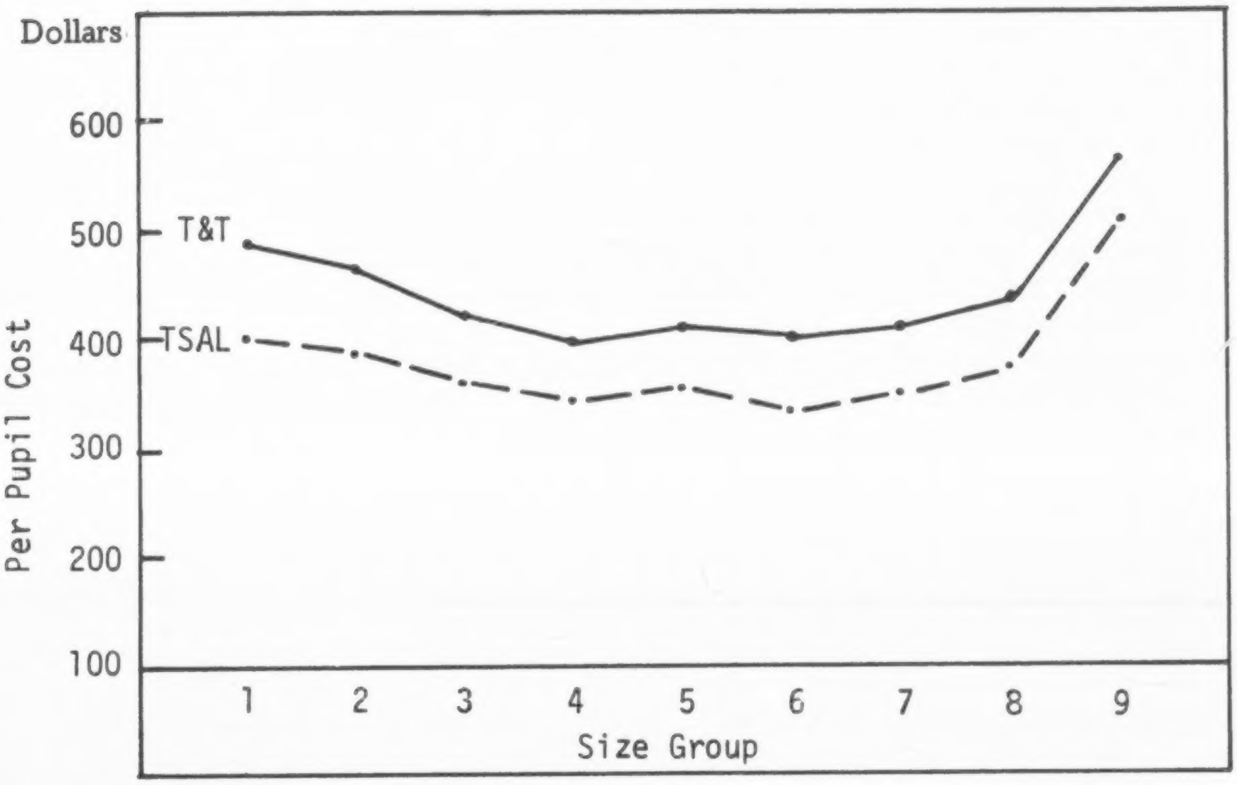
PER-PUPIL COST FOR SALARIES

Size Group	Cert. Staff		Prof. & Tech.		Sec'y. Craft and Other		Empl. Bnfts.		Total	
	Teach.	Other	Teach.	Other	Teach.	Other	Teach.	Other	Teach.	Other
1	$ 401	$ 98	$ 7	$ 14	$ 8	$ 105	$ 21	$ 19	$ 438	$ 235
2	391	100	2	13	9	109	21	17	423	239
3	360	85	1	7	6	92	17	14	384	198
4	344	78	1	5	8	83	16	13	369	179
5	351	83	1	5	7	90	16	14	376	192
6	334	72	1	2	14	85	18	12	366	171
7	350	83	1	2	8	96	17	14	376	195
8	376	84		4	7	108	18	15	401	211
9	491	68	1	4	14	173	26	22	532	267
State Average	$ 374	$ 89	$ 3	$ 9	$ 8	$ 98	$ 19	$ 16	$ 404	$ 212

Other Per-Pupil Costs

Size Group	Suppl. & Mtl.		Contr. Serv.		Cptl. Outlay		Books		Travel	
	Teach.	Other	Teach.	Other	Teach.	Other	Text	Libr.	Instr.	Other
1	$ 13	$ 33	$ 8	$ 41	$ 6	$ 8	$ 6	$ 4	$ 2	$ 3
2	13	39	4	36	8	12	8	5	2	3
3	11	37	3	40	7	12	7	4	2	3
4	12	37	1	39	7	14	7	4	2	2
5	13	41	2	48	7	14	6	4	2	2
6	14	41	2	48	8	19	8	5	2	2
7	16	47	2	56	6	17	8	5	2	3
8	18	57	2	78	9	23	9	5	1	3
9	15	73	2	160	4	23	12	8	1	6
State Average	$ 13	$ 38	$ 4	$ 43	$ 7	$ 12	$ 7	$ 4	$ 2	$ 3

Figure 9
PER-PUPIL COST–TEACHING AND TEXTBOOKS VERSUS TEACHERS' SALARIES



C. Expenditures by Program Element–Indirect Costs

It has been shown that the fluctuations in the direct costs for teaching and textbooks are due almost entirely to the fluctuations in the per-pupil cost of classroom teachers' salaries. The cause of the rise above the average per-pupil cost of teachers' salaries is different for the two ends of the graph of Figure 8. The average teacher's salary was $8,454 in 1968-69. Groups 1 and 2 were $348 and $209 above this average. This accounted for the above-average per-pupil cost of teachers' salaries in the urban districts of groups 1 and 2. The steep increase over groups 7, 8 and 9, on the other hand, was caused by reduced pupil to teacher ratios, which were sufficient to overcome the reduced average salaries. The pertinent statistics are displayed below.

	Size Group			State Average
	7	8	9	
Average Teacher Salary	$7,631	$7,467	$7,094	$8,454
Difference from State Average	$ 823	$ 987	$1,360	
Average Student - Teacher Ratio	23.5	21.8	17.0	24.8
Difference from State Average	1.3	3.0	7.8	

The indirect costs contribute additional variability to the per-pupil cost of the K-12 program and the total expenditure. Table 6 gives the average per-pupil costs of the main elements of the total program. Per-pupil costs are calculated using average annual enrollment. The program elements are defined in terms of the "Functions" of SPI Form A-57-1, Part II, total expenditure column, as follows.

Col. 1. Teaching and Textbooks – this may be interpreted as the direct cost of providing a teacher and textbooks for instruction.

Col. 2. Principal, Library, Counseling and Extracurricular – this includes the additional staff and services which provide support to instruction at the school building level.

Col. 3. Administration of Instruction, Insturctional Aids, Educational T.V. – these are programs usually at the school district office level, which directly support instruction.

Col. 4. Board and Superintendent's Office – these are the costs of the other school district level activities.

Col. 5.-8. These are indirect costs with respect to the instructional program and are usually costed at the school district level.

Col. 9. Total – this is the total appropriation expenditure per pupil in average annual enrollment.

The per-pupil costs given in Table 6 are cumulated by program element and plotted in bar charts for each size group in Figure 10. Figure 11 gives individual line plots of the data in columns 2, 3, 4, 7, and 8. Pupil Services (Col. 5) accounts for only $12.58 per pupil state-wide and declines steadily from $18 in group 1 to $3 in group 9. Food Services (Col. 6) accounted for about $35 state-wide and followed the dish-shaped curve characteristic of total expenditure.

Inspection of Figure 21 reveals the following:

1. The cost of transportation was the greatest contributor to the increased indirect costs in the smaller school districts, the differential between groups 1 and 9 being $89.
2. Maintenance and operation costs contributed to the variability in both tails of the total cost curve. The difference from the average of groups 4, 5 and 6 were: $26 and $19 for groups 1 and 2; $24 and $56 for groups 8 and 9.
3. The cost of the "school program" (principal, library, counseling, extracurricular) was the greatest contributor to the increased costs in the large districts. The greatest differential in size-group averages was $65, between groups 2 and 9.
4. The cost of instructional specialists and aids at the school-district level contributed a differential of $24 between groups 1 and 2 and group 9.
5. Board and superintendent's office followed the dish-shaped total cost curve, but with an accentuated tilt. The averages for groups 1 and 2 were *below* the state average ($24) but groups 5 through 9 were above it, group 9 by $50.

With regard to item 5, a slightly different picture is obtained when instructional services and school-district office costs are combined. This addition reflects the practice in the smaller school districts where the superintendent's office may consist of one or two persons who may have additional school or instructional responsibilities. The average per-pupil costs for this combined superintendent's office were:

Size Group	1	2	3	4	5	6	7	8	9
PP Cost ($)	56	56	40	35	37	35	43	58	74

The corresponding state average cost $47.50. The implication to be drawn here is that the larger school districts did spend more than the state average on administration, but that more than half of the expenditure was for direct instructional assistance and development. In the districts with fewer than 5,000 pupils, more than half of the school-district office costs were charged to the superintendent's office. In size group 9, only 12 percent of the school district office expenditures were directed to instructional assistance and development.

Table 6

PER-PUPIL EXPENDITURE BY "PROGRAM ELEMENT"

Size Group	Teaching & Textbooks	Princ., Libr., Couns. & X-Cur.	Admin.-Inst. A-V & ETV	Board & Supt.	Pupil Services	Food Services	Pupil Trans.	Oper. & Maint.	Total
$ 1	$ 483.08	$ 96.80	$ 32.59	$ 23.21	$ 18.20	$ 36.05	$ 17.77	$ 104.76	$ 814.39
2	466.20	101.12	33.18	23.26	15.83	34.90	29.37	97.63	807.03
3	423.55	89.82	20.45	20.04	10.17	35.36	29.64	85.75	722.66
4	399.93	78.49	14.49	20.31	8.03	30.65	41.38	76.23	676.21
5	412.28	83.98	11.37	25.91	8.95	33.45	44.53	84.75	716.88
6	405.02	73.01	9.15	26.14	6.36	33.18	53.21	76.05	693.32
7	413.09	75.86	7.82	35.17	7.09	36.53	59.46	88.55	736.05
8	435.27	65.07	6.43	51.51	3.05	44.44	74.45	102.72	806.78
9	502.31	35.84	8.84	65.07	2.91	51.42	106.35	135.15	934.47
Total	$ 444.18	$ 89.11	$ 23.11	$ 24.40	$ 12.58	$ 35.08	$ 33.27	$ 92.80	$ 761.33

Figure 10

PER-PUPIL EXPENDITURE BY PROGRAM ELEMENT

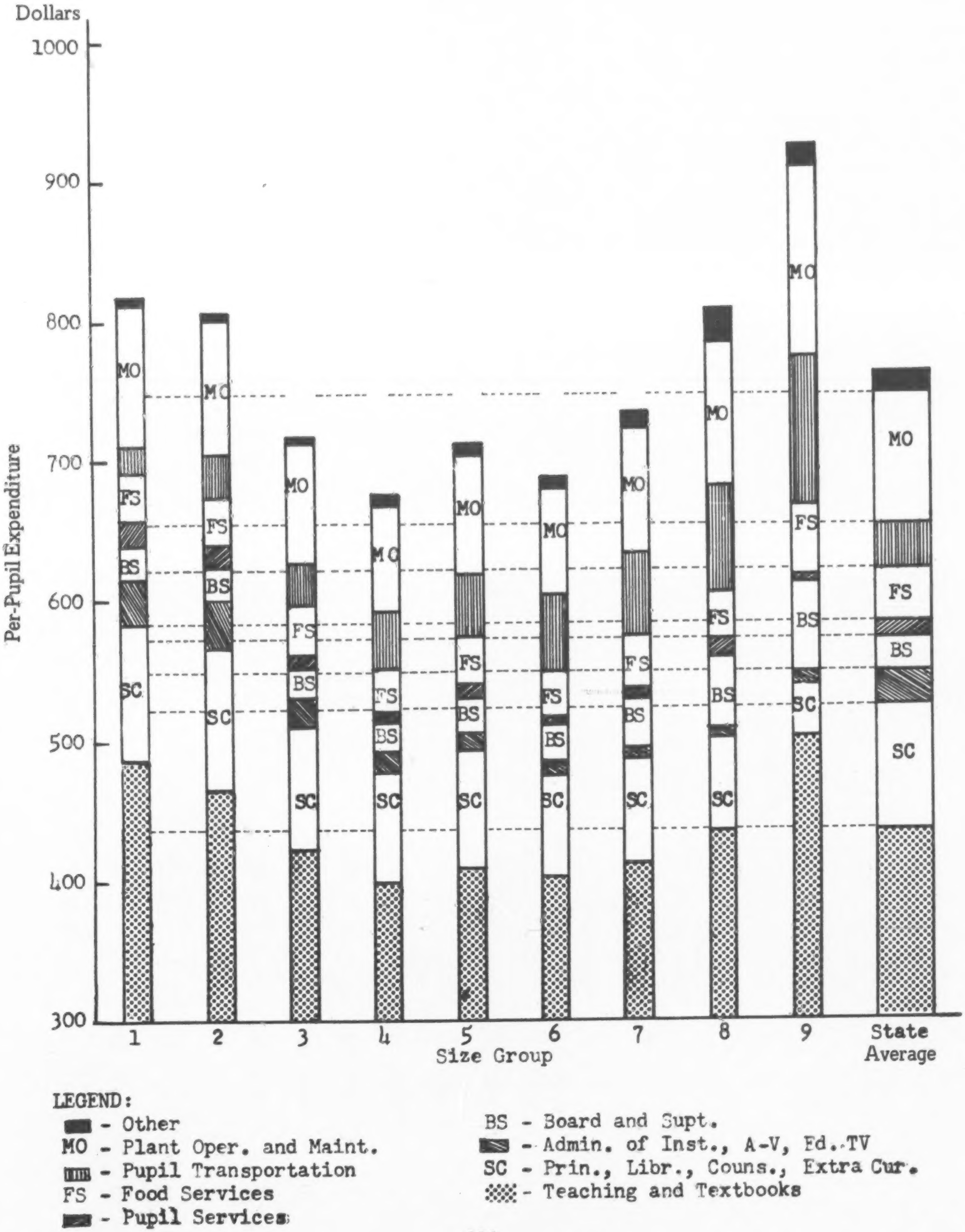
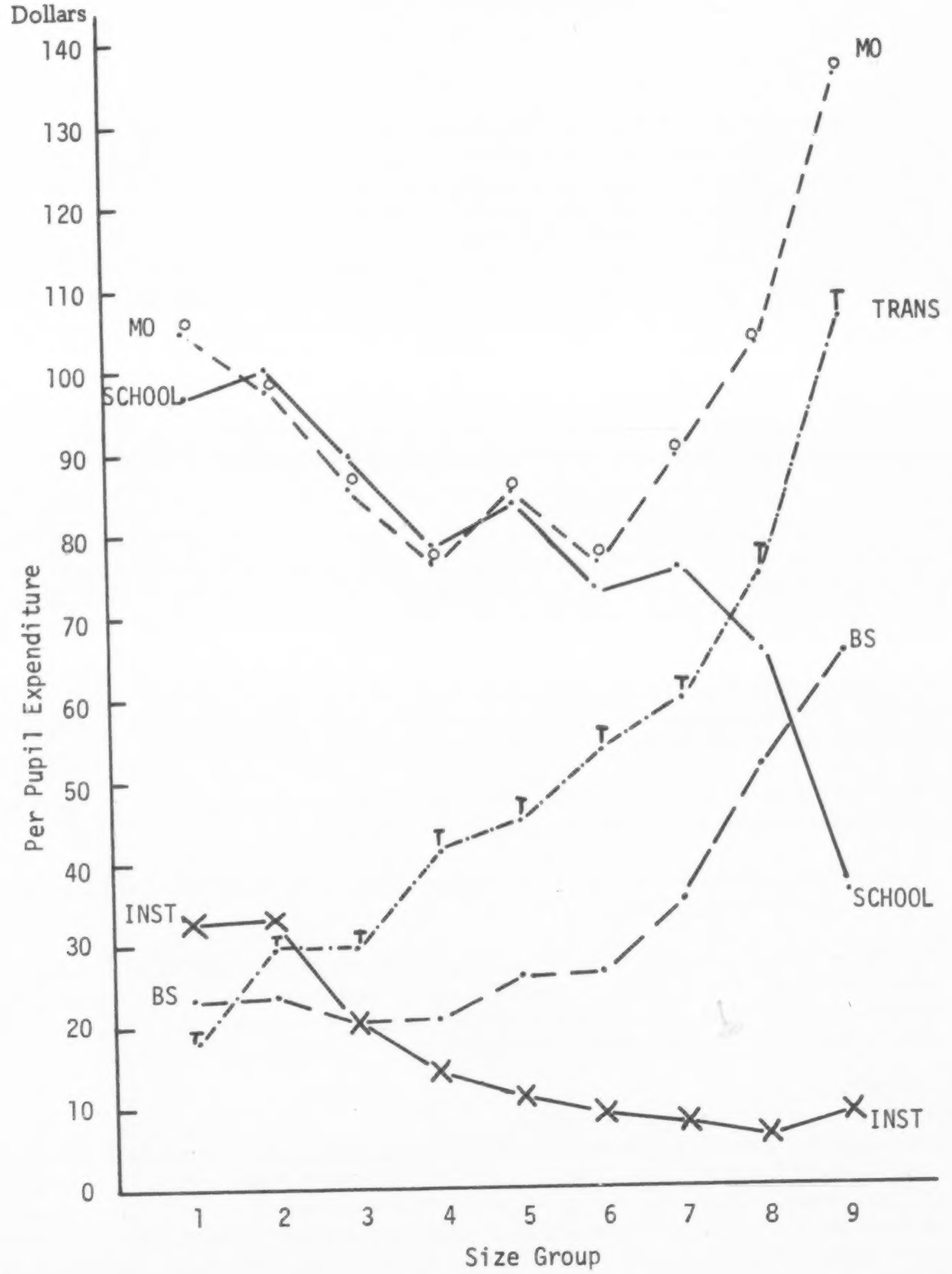


Figure 11

PER–PUPIL COST OF PROGRAM ELEMENTS



Legend:
Principal, Library, Counseling, Extracurricular . . . . (SCHOOL)
Administration of Instruction . . . . (INST)
Board and Superintendent . . . . (BS)
Transportation . . . . (T)
Maintenance and Operation . . . . (MO)

Section 3

STAFFING PATTERNS

Introductions

During the 1968-69 school year the school districts of the state spent $475,241,948 on salaries, wages, and employee benefits. This represents 82.2 percent of the total general fund expenditures of $577.7 million. The total expenditures for staff were allocated as follows: 60.7 percent for classroom teachers, 14.5 percent for other certificated staff, 17.2 percent for classified staff, 1.9 percent for professional and technical staff, and 5.7 percent for employee benefits.

The local school districts of the state employed 53,000 persons at an average cost per staff member of $8,967. The state-wide utilization of staff was: 58.4 percent in classroom teachers, 15.9 percent in other certificated staff, 4.3 percent in teacher's aides and 21.4 percent in classified staff.

The objective of this section is to determine what staffing resources this level of funding provided for school districts of various sizes. The answer is to be found through analysis of the percentage of total staff in the various types of positions and by staffing ratios. (Section 2 analyzed the average costs and their variability.) The data used for this analysis came from the School Information Tape File of SPI containing the information reported by the schools on the "School Staff Report" (SPI Form F-72-S).

Conclusions

Generally, the statistics show a very similar staffing pattern for all school districts with more than 1,600 average annual enrollment. Differences between the size group averages and the state averages begin to appear in high school districts with 1,000-1,600 students and become quite marked in all districts, both high school and nonhigh school, with less than 1,000 enrollment. In addition, the statistics for the school districts *within* the smaller size groups show increased variability.

The following points are particularly significant.

- Classified staff, (perhaps mainly transportation staff) accounted for a disproportionate percentage of the staff in the smaller districts. (See Figure 1, page 6.)
- The student-teacher ratio in 91 school districts, all with fewer than 1,000 students, was below 20 students per teacher. (See Figure 2 and Table 6, below.)
- There are 63 school districts which had more than one other staff member for each classroom teacher. (See Figure 4 and Table 14, below.)
- The major lack of consistency in the staffing pattern occurred in the ratio of teachers to other certificated staff. The elementary schools in the 15 largest districts had fewer teachers per other certificated staff than the secondary schools, but the reverse was the case in the other size groups. (See Table 15 and Figure 5, below.)

Summary of Results

A. Percentage of Total Staff by Type of Position

The percentage of total staff for each of the positions reported on the "School Staff Report" is given in Table 1 for each of the school district size groups. The last row of Table 1 gives the number of school districts in the size group, and the second-to-last row gives the total number of staff in the size group upon which the percentages are based. The general pattern of greater deviation from the state-wide percentages in the smaller school districts in groups 7 through 9, (which had less than 1,000 average annual enrollment) is apparent for the following positions:

Principals. School districts with fewer than 1,000 pupils, groups 7, 8 and 9 in both high and nonhigh districts, have smaller schools which each require a principal. These districts do not require a staff as large as in the bigger districts. It should also be noted that many of these principals also spend time teaching in the classroom. The result was a greater percentage of total staff in the position of Principal..

Assistant Principals. The smaller school districts, having smaller schools, do not use the assistant principal position as much as the larger districts. This decline appears in size group 6, districts with less than 1,600 enrollment.

Teachers and Teacher's aides will be considered separately below.

Other Certificated. An appreciable drop from the state-wide percentage is not evident until size group 8 in the high school districts, but is more pronounced in the nonhigh districts. This may be a reflection of the lack of ability to provide special pupil services personnel, but it is mainly indicative of the smaller school district offices.

Part-Time Certificated. A sharp rise in the use of part-time staff occurs in high school districts with less than 500 enrollment, but the nonhigh districts with less than 500 enrollment have a below-average percentage.

Classified Staff. Secretaries, custodians and food services staff show no marked deviation from the state percentages for their positions. The reporting of other classified staff increases sharply for both high and nonhigh districts with less than 1,000 enrollment (groups 7, 8, and 9). This is most likely a result of the relatively greater effort required to support student transportation.

The percentages of total staff for full-time classroom teachers, all certificated staff, all teacher's aides and all classified personnel are summarized in Tables 2 thru 5, which also give the maximum, minimum and range of the percentages calculated for each school district in the size group.

Figure 1 contains cumulative bar charts which allocate the 100 percent of total staff into the 4 major position classifications. Note that the size group means are within about 2 percentage points of the state mean for the first 6 size groups for all position types.

Classroom Teachers. Classroom Teachers account for 58 percent of the total staff employed in the school districts. The high school districts with more than 500 students (groups 1 thru 7) maintain a deviation of less than 3 percent from the state mean for their group mean. However, as Table 2 shows, the range of percentages sharply increases at group 7, indicating that the broad disparity of percentage of staff in teaching positions starts in school districts with less than 1,000 enrollment. The nonhigh districts, except for the smallest in group 9, show a comparatively small range, but their means are 6 to 10 percentage points below the state average. (See Table 2.)

Total Certificated Personnel. As Table 3 shows, the percentages of total staff in certificated positions follow much the same pattern as those for teachers, who constitute 79 percent of the certificated staff. There are enough nonteaching certificated staff in high school districts in size groups 1 thru 7 to bring the cumulative percentage to within about 2 percent of the state average. (See Figure 1.) The decrease in the percentage of nonteaching certificated staff in the nonhigh districts is no doubt due to both fewer nonteaching staff in these schools and the relative increase of classified personnel.

Classified Personnel. The drop in percentage of certificated staff in the smaller districts is caused by a relative increase in the number of classified staff.

Again, the size group mean percentage stays within 2 percent of the state mean of 21 percent through group 7, but large variability into groups among school districts starts in group 7. The higher percentage of staff in classified positions in the high school districts with less than 500 enrollment and in all nonhigh districts is mainly due to transportation requirements as pointed out above.

Table 1

PERCENTAGE OF TOTAL STAFF
POSITION BY SIZE GROUP

Position	High School Districts 1	2	3	4	5	6	7	8	9	State Average*	Nonhigh Districts + 7	8	9
Principals	2.1	2.2	2.5	2.8	3.0	3.4	4.0	5.0	6.8	2.7	3.6	4.5	4.0
Ass't. Princ.	.9	.8	.8	.8	.7	.2	.2	0	0	.7	0	.8	0
Teachers	59.5	57.2	58.8	61.1	58.4	58.6	56.2	52.7	50.4	58.4	47.2	52.2	47.1
Other Cert.	10.2	10.9	9.5	8.4	9.3	8.8	9.0	7.0	1.1	9.5	5.3	2.0	.3
P-T Cert.	2.2	3.3	2.7	2.2	3.7	3.9	4.0	7.2	6.5	3.0	6.5	1.8	1.8
TA's	2.2	3.3	1.6	3.4	3.3	3.4	3.6	1.9	2.5	2.6	0	3.9	3.7
P-T TA's	.6	2.0	2.1	2.1	1.9	1.5	1.9	1.7	6.1	1.7	13.4	2.8	6.0
Sec'y	5.3	5.2	4.7	4.4	4.2	4.2	3.8	3.8	5.5	4.8	3.6	5.0	4.3
Custod.	8.3	7.6	7.2	7.4	7.7	7.7	7.6	7.7	7.6	7.7	7.1	8.7	12.3
Food	7.4	6.2	8.4	6.5	6.7	7.2	6.4	7.1	8.0	7.2	8.0	9.2	8.3
Other Class.	1.4	1.2	1.8	.9	1.0	1.0	3.3	5.9	5.5	1.7	5.3	9.2	12.3
Total Staff	16306	8680	9294	6446	3651	2294	3210	1506	474	53000	112	355	350
No. of SD's	6	9	20	29	25	27	58	50	26	327	2	15	58

*Includes nonhigh school districts.

†Mukilteo (Group 4) and DuPont (Group 6) are the only nonnigh districts in their respective size groups and are not summarized although their data are used in the state statistics.

Figure 1

PERCENTAGE OF TOTAL STAFF BY POSITION FOR EACH SIZE GROUP

Legend: T - Classroom Teachers, C - All Certificated, CL - Classified, TA - All Teacher's Aides

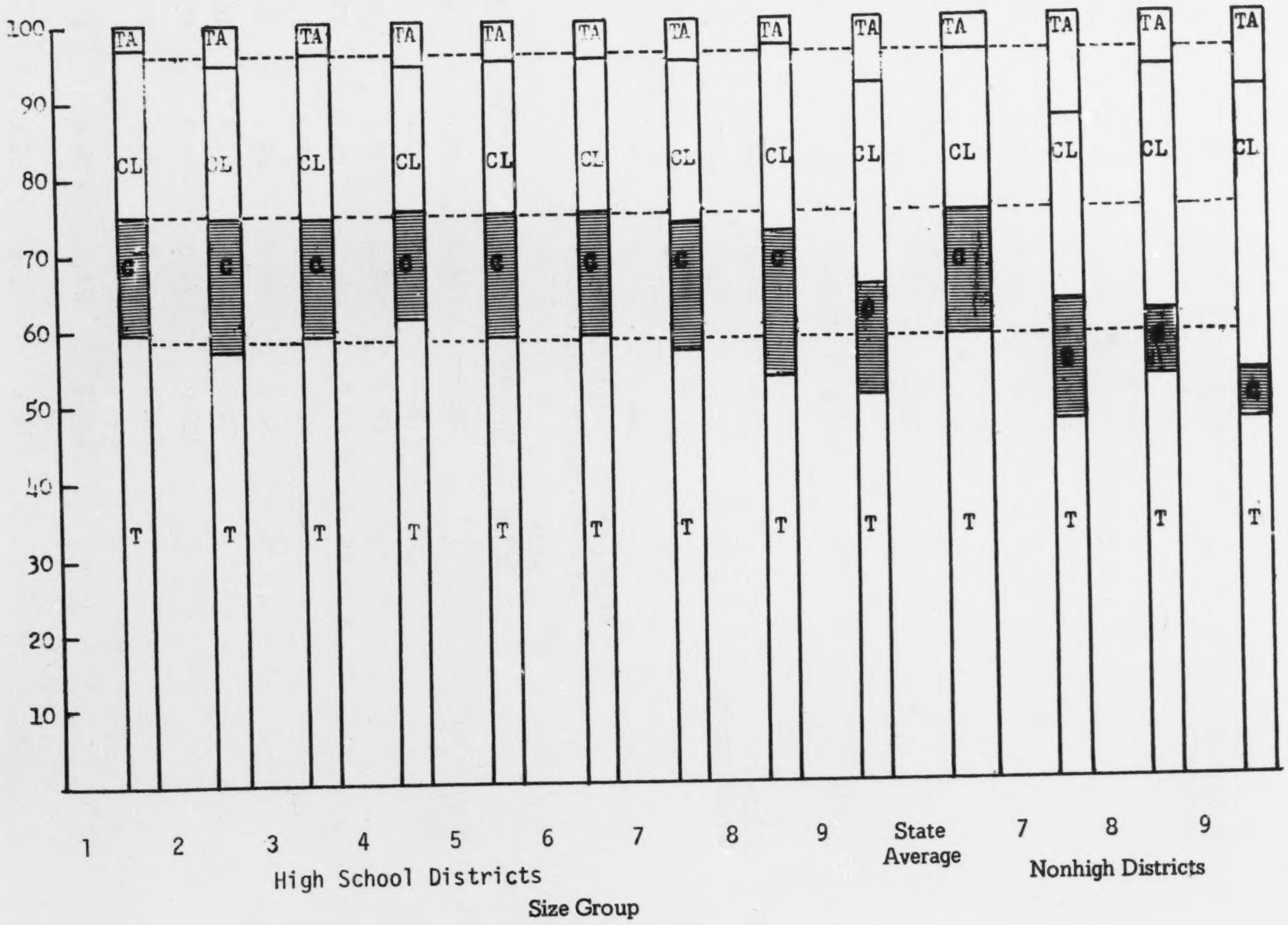


Table 2
TEACHERS–PERCENTAGE OF TOTAL STAFF

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	62.8	59.5	56.2	6.6
	2	62.0	57.2	53.0	9.0
	3	64.4	58.8	52.3	12.1
	4	71.1	61.1	53.4	17.7
	5	68.6	58.4	48.8	19.8
	6	72.3	58.6	44.6	27.7
	7	100.0	56.2	31.0	69.0
	8	100.0	52.7	21.1	78.9
	9	83.3	50.4	31.0	52.3
State		100.0	58.4	21.1	78.9
Nonhigh School Districts	7	58.6	47.2	44.4	14.2
	8	61.7	52.2	41.3	20.4
	9	100.0	47.1	25.0	75.0

Table 3
TOTAL CERTIFICATED PERSONNEL–PERCENTAGE OF TOTAL STAFF

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	78.7	74.9	73.3	5.4
	2	78.0	74.5	70.6	7.4
	3	80.3	74.3	70.5	9.8
	4	83.4	75.3	69.7	13.7
	5	82.5	75.1	67.3	15.2
	6	88.6	74.9	68.3	20.3
	7	100.0	73.5	53.4	46.6
	8	100.0	72.0	39.3	60.7
	9	100.0	64.8	43.9	56.1
State		100.0	74.3	25.0	75.0
Nonhigh School Districts	7	78.2	62.6	58.5	19.7
	8	70.0	61.2	50.3	19.7
	9	100.0	53.2	25.0	75.0

Table 4

TOTAL CLASSIFIED PERSONNEL–PERCENTAGE OF TOTAL STAFF

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	24.2	22.3	17.9	6.3
	2	23.6	20.2	16.7	6.9
	3	26.6	22.0	17.0	9.6
	4	26.3	19.2	13.4	12.9
	5	32.1	19.6	11.4	20.7
	6	28.1	20.1	11.4	16.7
	7	98.9	21.0	3.1	95.8
	8	56.7	24.5	.0	56.7
	9	57.1	26.6	.0	57.1
State		98.9	21.4	.0	98.9
Nonhigh School Districts	7	25.5	24.1	16.3	9.2
	8	37.3	32.0	27.6	9.7
	9	66.7	37.1	.0	66.7

Table 5

TOTAL TEACHER AIDES–PERCENTAGE OF TOTAL STAFF

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	6.4	2.8	1.1	5.3
	2	7.9	5.3	.4	7.5
	3	10.0	3.7	.1	9.9
	4	9.8	5.5	1.1	8.7
	5	12.6	5.3	.0	12.6
	6	12.6	5.0	.0	12.6
	7	17.4	5.5	.0	17.4
	8	15.5	3.5	.0	15.5
	9	28.6	8.7	.0	28.6
State		50.0	4.3	.0	50.0
Nonhigh School Districts	7	16.0	13.4	.0	16.0
	8	14.7	6.7	.0	14.7
	9	50.0	9.7	.0	50.0

B. Staff Ratios

Various average (mean) student to staff ratios and full-time classroom teacher to other staff ratios are given in Tables 6 thru 14 for each size group. These tables also contain the maximum, minimum, and range of the ratios calculated for each school district in the size group. Figures 2, 3, and 4 are histograms which display the frequency, both in percentages and number of school districts, with which the ratios, student to teacher, teacher to other certificated staff, and all other staff to teachers, occurred in the intervals defined on the horizontal axis of the figure. These histograms are based on all 326 school districts in the state.

Student to Teacher Ratios. The state average is 24.8 students per full-time classroom teacher. The fact that it took a range as broad as 20 to 30 pupils per teacher to account for 68 percent of the school districts was unexpected. A breakdown of the numbers of school districts having pupil to teacher ratios in intervals of 2 pupils per teacher is given below.

FREQUENCY DISTRIBUTION OF PUPIL TO TEACHER RATIOS

	Size Group							
	1-6		7-9 HS		7-9 Non HS		State	
Interval	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Less than 20	0	0 %	55	41.4 %	28	37.3 %	83	25.5 %
20-21.9	1	0.9	20	15.0	7	9.3	28	8.6
22-23.9	14	12.1	24	18.0	7	9.3	45	13.8
24-25.9	62	53.4	16	12.0	8	10.7	86	26.4
26-27.9	27	23.3	6	4.5	8	10.7	42	12.9
28-29.9	11	9.5	6	4.5	4	5.3	22	6.7
30 or More	1	0.9	6	4.5	13	17.3	20	6.1
Total	116	100.1%	133	99.9%	75	99.9%	326	100.0%

Over half of the districts with more than 1,000 pupils (size groups 1-6) had pupil to teacher ratios in the 2-pupil range between 24 and 26. High school districts with fewer than 1,000 pupils (groups 7-9) placed only 12 percent of their districts in this range, and a majority of these districts, 56 percent had ratios of less than 22 pupils per teacher. The nonhigh districts placed 11 percent of their districts in the mid-range of 24 to 26 students, with over half falling outside of the broad range between 20 and 30, about a third below 20, and a sixth above 30 pupils per teacher.

As seen from Table 6, the high school districts with more than 1,000 enrollment (groups 1-6) and the two nonhigh districts with 500-1,000 students (group 7) maintain a group average within 1 percent of the state average. A steady drop occurs in the group average for 7, 8, and 9 in the high school districts. For the nonhigh districts group 8 has an average 2 percent above the state average and group 9 drops to only 21 pupils as opposed to 14 pupils for the high school districts in group 9.

The data for Figure 2 reveal that there are 91 school districts in the state with a student to teacher ratio of less than 20 to 1, and 14 with a ratio greater than 30 to 1. Thus, 222, or about two thirds of the school districts in the state fall into the 20-30 student to teacher range. In the 116 districts with more than 1,000 students only one school district (South Kitsap, with 31.7) was out of the 20-30 range. Seven of the districts with ratios greater than 30 to 1 are high school districts and 7 are nonhigh districts.

Student to Certificated Staff Ratios. The average student to total certificated staff ratio is consistently about 5 students below the student to teacher ratio for the high school districts with more than 200 students. (See Table 7.) That is to say, these staff ratios follow the same pattern for all but the smallest high school group.

Figure 2

DISTRIBUTION OF STUDENT TO TEACHER RATIOS

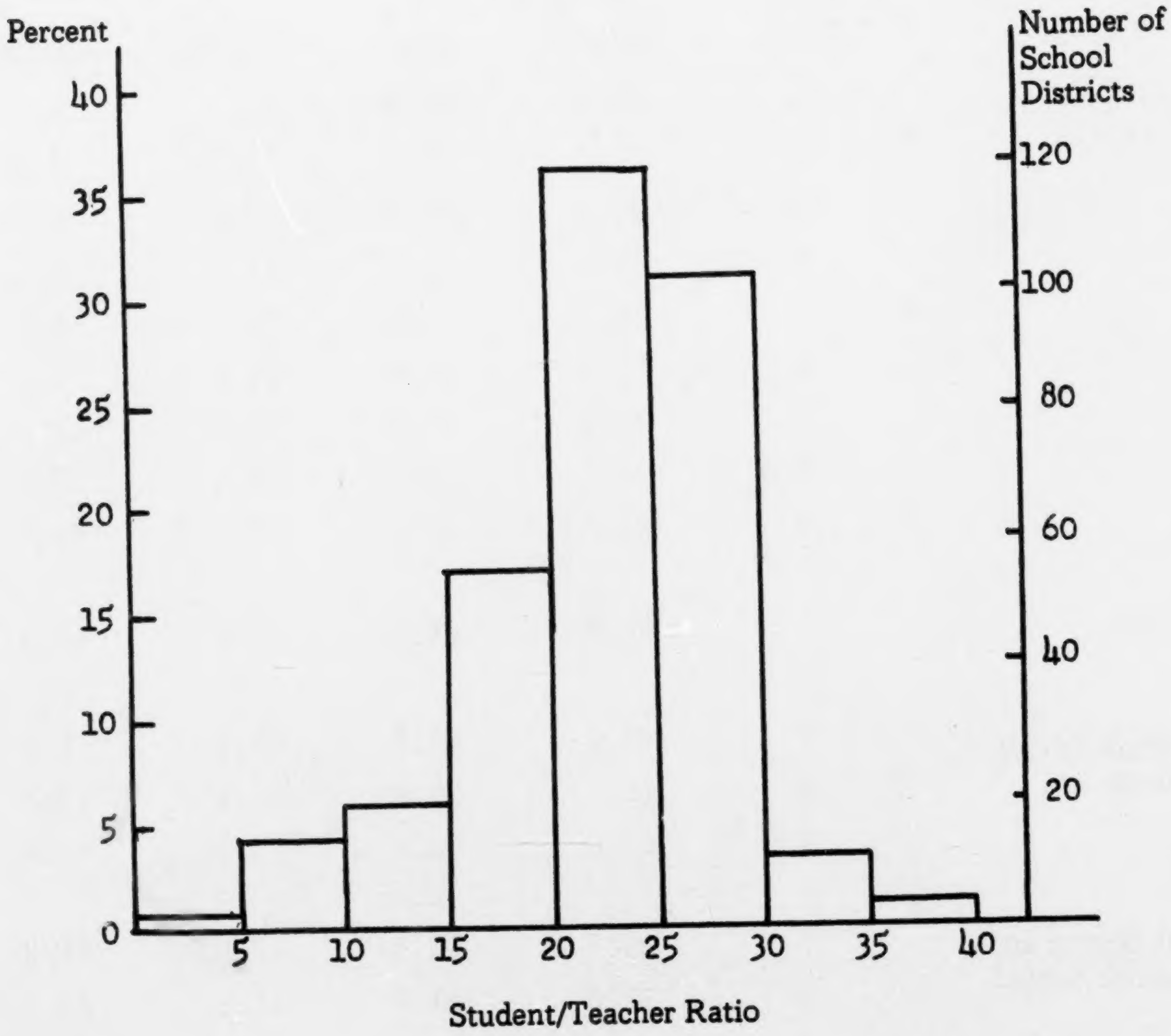


Table 6

STUDENT TO TEACHER RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	26.3	24.4	22.7	3.6
	2	26.7	25.0	23.7	3.0
	3	31.7	25.7	23.6	8.1
	4	29.1	25.8	22.9	6.2
	5	28.7	25.4	22.2	6.5
	6	29.9	25.3	21.8	8.1
	7	39.1	23.5	17.8	21.3
	8	32.7	20.7	11.5	62.1
	9	29.2	14.4	5.8	23.4
State		50.0	24.8	3.0	47.0
Nonhigh School Districts	7	29.7	24.7	21.1	8.6
	8	35.0	26.8	21.9	13.1
	9	50.0	20.6	3.0	47.0
High School and Nonhigh School	7	39.1	23.5	17.8	21.3
	8	35.0	21.8	11.5	23.5
	9	50.0	17.0	3.0	47.0

Table 7

STUDENT TO CERTIFICATED STAFF RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	20.4	19.4	17.6	2.8
	2	20.9	19.2	17.9	3.0
	3	26.1	20.4	18.2	7.9
	4	23.0	20.9	17.1	5.9
	5	23.0	19.8	16.7	6.3
	6	24.2	19.8	16.3	7.9
	7	31.5	18.0	9.0	22.5
	8	22.0	15.1	9.3	12.7
	9	15.6	11.2	5.1	10.5
State		31.0	19.5	3.0	28.0
Nonhigh School Districts	7	20.0	18.6	17.8	2.2
	8	30.8	22.8	18.0	12.8
	9	31.0	18.3	3.0	28.0

Table 8

STUDENT TO TEACHER AIDE RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	1,363.7	518.1	231.4	1,132.3
	2	3,371.9	270.8	170.6	3,201.3
	3	9,545.0	406.3	148.5	9,396.5
	4	1,654.8	286.1	136.5	1,518.3
	5	2,380.5	280.7	106.0	2,274.5
	6	1,021.7	298.7	0.0	1,021.7
	7	974.5	240.0	0.0	974.5
	8	489.0	309.6	0.0	489.0
	9	111.5	84.0	0.0	111.5
State		9,545.0	337.1	0.0	9,545.0
Nonhigh School Districts	7	287.7	87.1	0.0	287.7
	8	449.5	207.6	0.0	449.5
	9	378.9	100.2	0.0	378.9

Table 9

STUDENT TO CLASSIFIED STAFF RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	81.1	65.2	59.5	21.6
	2	81.1	70.6	60.0	21.1
	3	92.7	68.7	50.8	41.9
	4	136.8	82.2	61.0	75.8
	5	131.9	75.8	41.0	90.9
	6	154.7	73.7	39.8	114.9
	7	502.0	62.9	21.7	480.3
	8	362.5	44.5	0.0	362.5
	9	143.0	27.3	0.0	143.0
State		502.0	61.2	0.0	502.0
Nonhigh School Districts	7	95.9	48.4	40.8	55.1
	8	66.5	43.6	29.9	36.6
	9	89.1	26.2	0.0	89.1

Table 10

STUDENT TO ALL STAFF RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	15.3	14.5	13.6	1.7
	2	15.7	14.3	13.4	2.3
	3	18.6	15.1	13.4	5.2
	4	18.4	15.8	12.5	5.9
	5	18.5	14.8	13.2	5.3
	6	17.7	14.8	11.2	6.5
	7	17.0	13.2	8.7	8.3
	8	17.4	10.9	4.8	12.6
	9	12.5	7.3	3.7	8.8
State		20.7	14.2	2.3	18.4
Nonhigh School Districts	7	15.7	11.6	10.4	5.3
	8	18.3	14.0	10.4	7.9
	9	20.7	9.7	2.3	18.4

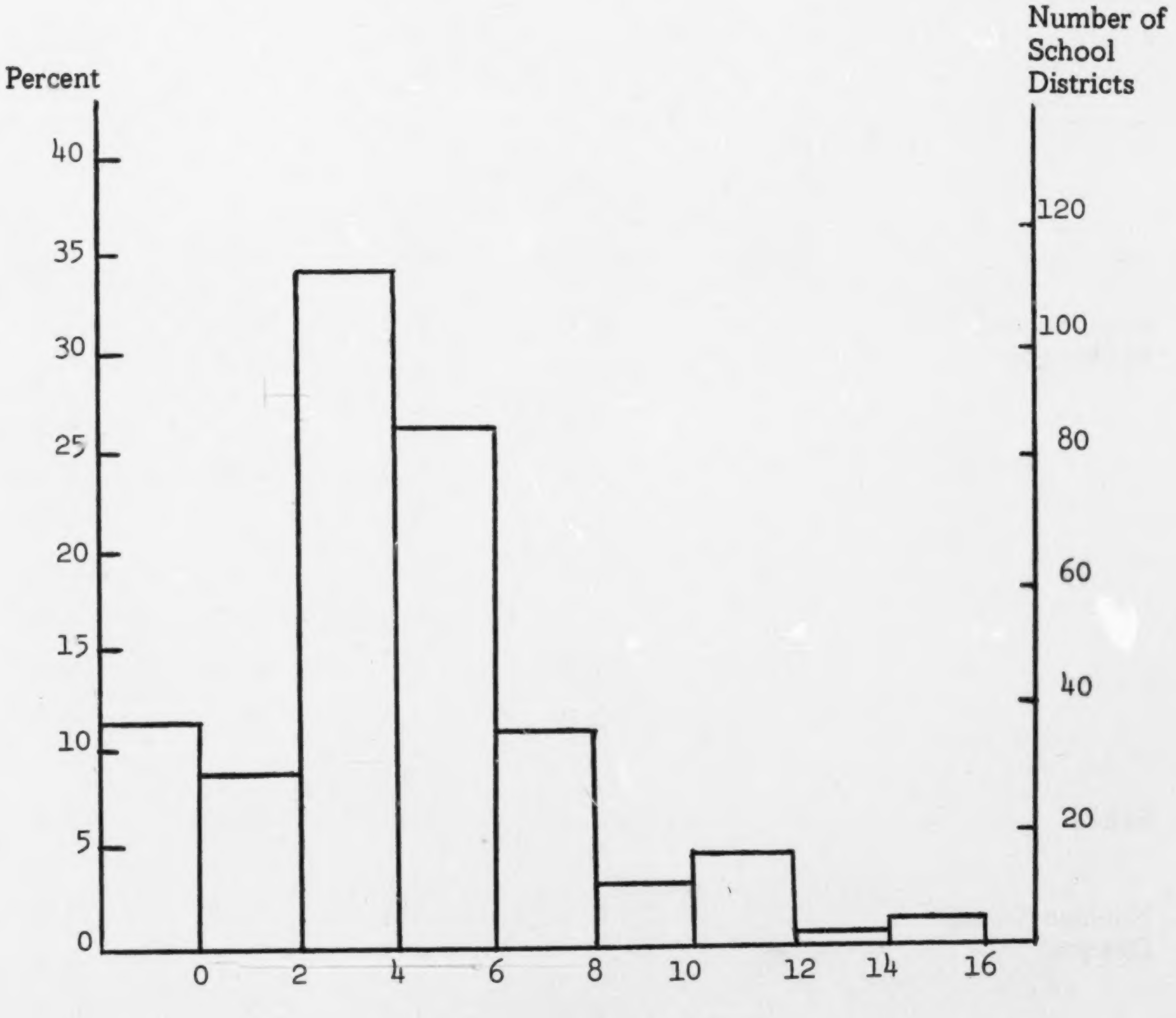
Table 11

TEACHER TO OTHER CERTIFIED STAFF RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	6.0	3.9	2.6	3.4
	2	4.5	3.3	2.9	1.6
	3	5.6	3.8	2.5	3.1
	4	7.0	4.3	2.5	4.5
	5	7.8	3.5	2.1	5.7
	6	11.7	3.6	1.2	10.5
	7	10.3	3.3	0.7	9.6
	8	15.0	2.7	0.0	15.0
	9	12.0	3.5	0.0	12.0
State		16.0	3.7	0.0	16.0
Nonhigh School Districts	7	5.5	3.1	1.9	3.6
	8	11.3	5.8	2.9	8.4
	9	16.0	7.8	0.0	16.0

Figure 3

DISTRIBUTION OF TEACHER TO OTHER CERTIFICATED STAFF RATIO



Teacher/Other Certificated Staff Ratio

Table 12

TEACHER TO TEACHER'S AIDES RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	51.8	21.2	16.8	35.0
	2	133.7	10.9	7.1	126.6
	3	372.0	15.8	5.9	366.1
	4	63.0	11.1	5.8	57.2
	5	93.0	11.1	0.0	93.0
	6	42.0	11.8	4.7	37.3
	7	42.0	10.2	0.0	42.0
	8	24.0	15.0	0.0	24.0
	9	13.0	5.8	0.0	13.0
State		372.0	13.6	0.0	372.0
Nonhigh School Districts	7	10.8	3.5	0.0	10.8
	8	19.0	7.8	0.0	19.0
	9	14.1	4.9	0.0	14.1

Table 13

TEACHER TO CLASSIFIED STAFF RATIO

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	3.2	2.7	2.5	.7
	2	3.4	2.8	2.2	1.2
	3	3.6	2.7	2.0	1.6
	4	4.7	3.2	2.3	2.4
	5	5.2	3.0	1.6	3.6
	6	6.0	2.9	1.6	4.4
	7	22.0	2.7	.8	21.2
	8	14.0	2.2	0.0	14.0
	9	5.0	1.9	0.0	5.0
State		22.0	2.7	0.0	22.0
Nonhigh School Districts	7	3.6	2.0	1.9	1.7
	8	2.2	1.6	1.1	1.1
	9	4.0	1.3	0.0	4.0

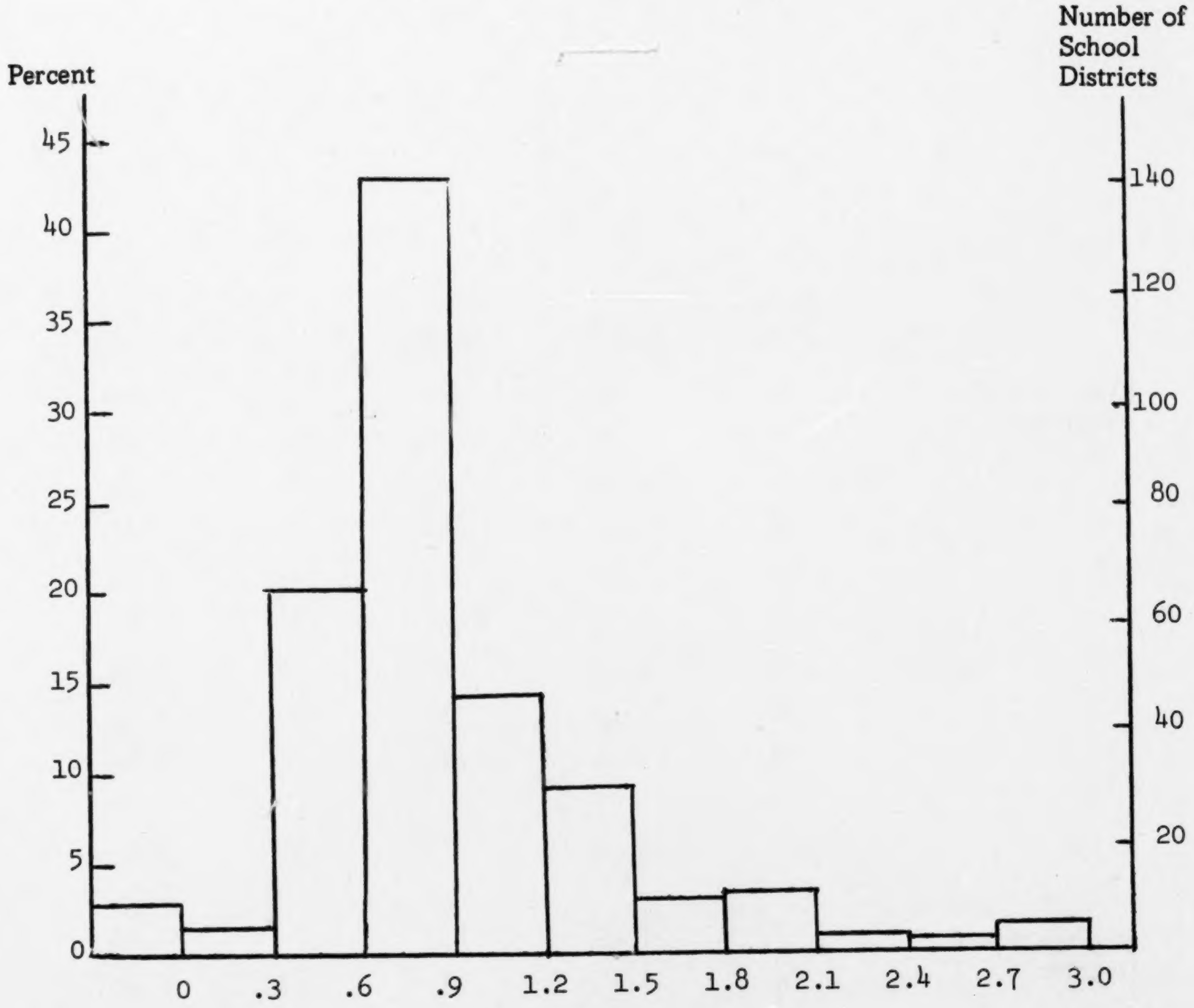
Table 14

OTHER STAFF TO TEACHER RATIOS

	Size Group	Maximum	Mean	Minimum	Range
High School Districts	1	.78	.68	.59	.19
	2	.89	.75	.61	.28
	3	.91	.70	.55	.36
	4	.87	.64	.41	.46
	5	1.05	.71	.46	.59
	6	1.24	.71	.38	.86
	7	2.22	.78	.39	1.83
	8	2.89	.90	.27	2.62
	9	2.23	.98	.20	2.03
State		3.00	.71	.20	2.80
Nonhigh School Districts	7	1.25	1.12	.71	.54
	8	1.42	.92	.62	.80
	9	3.00	1.12	.00	3.00

Figure 4

DISTRIBUTION OF ALL OTHER STAFF TO TEACHER RATIOS



Other Staff/Teacher Ratio

Student to Classified Staff Ratios. The state average was 61 students per classified staff. School district groups with more than 500 enrollment were above this average by as much as 21 students (in group 4) and district groups below 500 enrollment were below by as much as 35 students. (See Table 9.)

Student to Teacher Aide Ratios. There is large variability of the group average student to teacher's aide ratios which range from 518 to 84 pupils per teacher's aide. The state average is 337. The variability among school districts within a given group, as indicated by the range is even more extensive. (See Table 8.) There were 84 school districts in the state that had no teacher's aides reported in 1968-69; 49 were high school districts and 35 nonhigh districts.

Consonant with the greater percentages of total staff in classified positions in the smaller districts (see Figure 1) these smaller districts do have fewer students per classified employee.

Students to All Staff Ratios. State-wide, one school district employee is hired for each 14 students. Again, the state average is meaningful through the first 7 groups and the nonhigh districts in group 8. But one staff member was used for each 11 students in group 8, and each 7 students in group 9. Nonhigh districts in group 9 had one staff member for each 10 students. (See Table 10.)

Teachers to Other Certificated Staff Ratios. State-wide, each 3.7 full-time teachers had one certificated person on the staff. The only pronounced deviations (greater than one teacher) occurred in the nonhigh districts with fewer than 500 enrollment, where the ratios are 6 teachers and 8 teachers per other certificated person for size groups 8 and 9, respectively. (See Table 11.)

Figure 3 shows the state-wide distribution of these ratios. There are 29 districts with a ratio of less than 2 teachers and 27 with a ratio greater than 8 teachers per other certificated staff. All 88 school districts with more than 1,600 enrollment have ratios in the 2-8 range. High school districts account for 26 of the less-than-2 ratios and nonhigh school districts for the other 3. Eighteen of the districts with ratios greater than 8 are high school districts. There are 38 districts, 2 high school in group 8 and 9, and 36 nonhigh districts in group 9, which reported no nonteaching certificated personnel.

Other Staff to Teacher Ratios. When the cost of education is calculated in terms of the teachers required to provide instruction, these ratios can be used to determine the additional staff required to attain the present staffing level. State-wide about three quarters of a person (0.71) was required for each full-time classroom teacher. This ratio is meaningful (deviates less than 0.1 from the average) through size group 7. Thereafter it increased to an almost one-to-one staffing pattern for high school districts in size groups 8 and 9 and in the nonhigh districts of group 8. In the other nonhigh districts the ratio is greater than one to one. (See Table 14.)

The distribution of this ratio is given in Figure 4. There were 9 districts that reported only teaching staff, so that their ratio is defined as zero. The range from 0.3 to 1.2 accounts for 255 school districts, including all districts with more than 1,600 students (groups 1 through 5). High school districts in groups 6 thru 9 exceed the 1.2 ratio for 30 districts and nonhigh districts exceed 1.2 for 33 districts.

The teacher to teacher's aides ratios (Table 12) and teacher to classified staff ratios (Table 13) hold no implications not noted above, but are included for completeness.

The large variability of the staff ratios and percentages for the smaller districts is partially explained by the fact that reporting of staff positions is somewhat arbitrary. When there are fewer staff to be allocated to the various positions, an inconsistency between districts in reporting a single individual can have a pronounced effect on the staff ratios or percentages.

C. Elementary-Secondary Comparisons

Student to Teacher Ratios. State-wide, there were 3.4 more pupils per classroom teacher in the elementary grades than in the secondary schools. The averages were 26.4 students per full-time teacher in elementary, and 23.0 in the secondary schools. The combined K-12 average was 24.8. The range of size group averages for elementary was 9.2 pupils, the minimum of 18.3 occur in the high school districts in group 9, and the maximum in the nonhigh districts of group 8. (See Table 15.) The range for secondary was 13.1 pupils, with the maximum 24.2, occurring in groups 3 and 4 and the minimum in the high school districts of group 9. The differences between elementary and secondary averages increase steadily from 2.2 pupils per teacher in group 1 to 9.2 in group 8. (See Figure 5 for a graphical comparison.)

Students to All Certificated Staff Ratios. State-wide, there were 19.5 students per certificated person, which includes certificated staff at the school district offices. In the elementary schools there were 22.4 pupils, and in the secondary, 19.5 pupils per certificated person. The ranges of observed size group averages were: 8.3 pupils for the elementary, and 12.6 for the secondary.

Students to Teacher's Aides. The state-wide average was 337 pupils per teacher's aide. The program averages were: elementary–238, secondary– 736 pupils per aide. Of the total 2,280 teacher's aides 1,830 are in elementary schools and 450 in secondary schools.

Students to All Staff. School district office staff are included in the state total of 14.2 students per staff member. The elementary schools have a ratio of 15.9 to 1 and the secondary 14.6 to 1. The differences in the size group averages for elementary and secondary range from 0.3 pupils in size group 4 to 5.1 in size group 9. That is, the staff split between elementary and secondary is almost equal in group 4, but there are 5 more pupils per staff member in the elementary schools of groups 8 and 9.

Teachers to Other Certificated Staff. There were 3.7 teachers for each person in the other certificated staff category. Five percent of the total certificated staff were located in school district offices. These 2,896 individuals accounted for 42 percent of the other certificated staff category. In the elementary schools there were, on a state-wide average, one other certificated individual for each 5.7 classroom teachers. In the secondary schools, the state average was about the same, 5.6 to 1. However, only size groups 3, 4, and 8 came close to this 0.1 difference between elementary and secondary, each of these had 0.3 more teachers per other in the elementary schools. (See Figure 6.) The 15 large school districts of groups 1 and 2 (with more than 10,000 pupils per district) had 0.9 and 0.5 fewer teachers per other certificated in their elementary than in their secondary schools, indicating a relatively greater use of other certificated staff in the elementary schools than in the secondary schools. In the school districts of size groups 5, 6, 7, and 9, the opposite was the case. There were 1.1 more teachers per other in the elementary schools of groups 5 and 7, 1.7 more in group 6, and almost 3 more in the high school districts of group 9.

This situation, in which the total K-12 program size group averages and the state averages for the individual programs mask the true picture, is the major difference observed in the staffing patterns of the elementary and secondary schools.

All Other Staff to Teachers. State-wide, each teacher had 0.71 of another person supporting him, with 0.13 of this person at the school district office. In the elementary schools, there was 0.65, and in the secondary schools, 0.58 other staff per teacher. The range for this ratio was 0.52 for the elementary, the minimum of 0.60 occurring for size group 1 and the maximum of 1.12 for the nonhigh districts of group 9. For the secondary, the range was from 0.49 in group 4 to 1.16 in the high school districts of group 9. The greatest difference between the elementary and secondary programs occurred in group 9, where the 25 secondary schools used 1.16 other staff per teacher, but only 0.78 in the elementary schools. The only other case where the difference was in the same direction was for the nonhigh districts of group 8 with a ratio of 1.02 for secondary and 0.89 for elementary. All other size groups had relatively more teacher support staff in their elementary schools than in their secondary schools. (Figure 7 provides a graphical comparison of these results.)

Table 15

STAFF RATIOS
ELEMENTARY AND SECONDARY SCHOOLS SIZE GROUP AVERAGES

	Size Group	SS/T	SS/CERT	SS/TA	SS/ALL	T/OCERT	T/TA	T/CLAS	OSTAFF/T
High School Districts	1 EL	25.4	21.7	354	15.9	5.9	13.9	2.8	.60
	SEC	23.2	20.3	1169	14.9	6.8	50.3	2.5	.56
	2 EL	26.7	22.3	194	16.1	5.1	7.3	3.1	.66
	SEC	23.0	19.5	568	14.4	5.6	24.7	2.6	.60
	3 EL	27.2	23.3	253	16.3	5.9	9.3	2.6	.67
	SEC	24.2	20.5	1489	15.5	5.6	61.6	2.8	.56
	4 EL	27.2	23.4	195	16.6	6.2	7.1	2.9	.64
	SEC	24.2	20.7	718	16.3	5.9	29.7	3.5	.49
	5 EL	27.1	23.0	223	16.3	5.6	8.2	2.8	.66
	SEC	23.2	19.0	466	14.7	4.5	20.1	3.3	.57
	6 EL	27.1	23.3	230	16.2	6.1	8.5	2.6	.67
	SEC	23.2	18.9	521	14.9	4.4	22.4	3.5	.56
	7 EL	26.2	22.2	197	15.5	5.6	7.5	2.6	.69
	SEC	20.4	16.7	354	12.4	4.5	17.4	2.8	.64
	8 EL	25.6	20.2	261	14.1	3.8	10.2	2.2	.81
	SEC	16.4	12.8	412	9.1	3.5	25.1	2.1	.80
	9 EL	18.3	15.5	107	10.2	5.6	5.8	2.3	.78
	SEC	11.1	8.1	64	5.1	2.7	5.8	1.6	1.16
Nonhigh School Districts	7 EL	24.7	19.7	87	12.1	4.0	3.5	2.0	1.04
	SEC								
	8 EL	27.5	23.8	189	14.6	6.5	6.9	1.7	.89
	SEC	22.3	18.4	730	11.0	4.7	32.7	1.3	1.02
	9 EL	20.6	18.3	100	9.7	7.8	4.9	1.3	1.12
	SEC								
	STATE EL	26.4	22.4	238	15.9	5.7	9.0	2.7	.65
	SEC	23.0	19.5	736	14.6	5.6	32.0	2.7	.58

Figure 5

STUDENT TO TEACHER RATIOS – SIZE GROUP AVERAGES

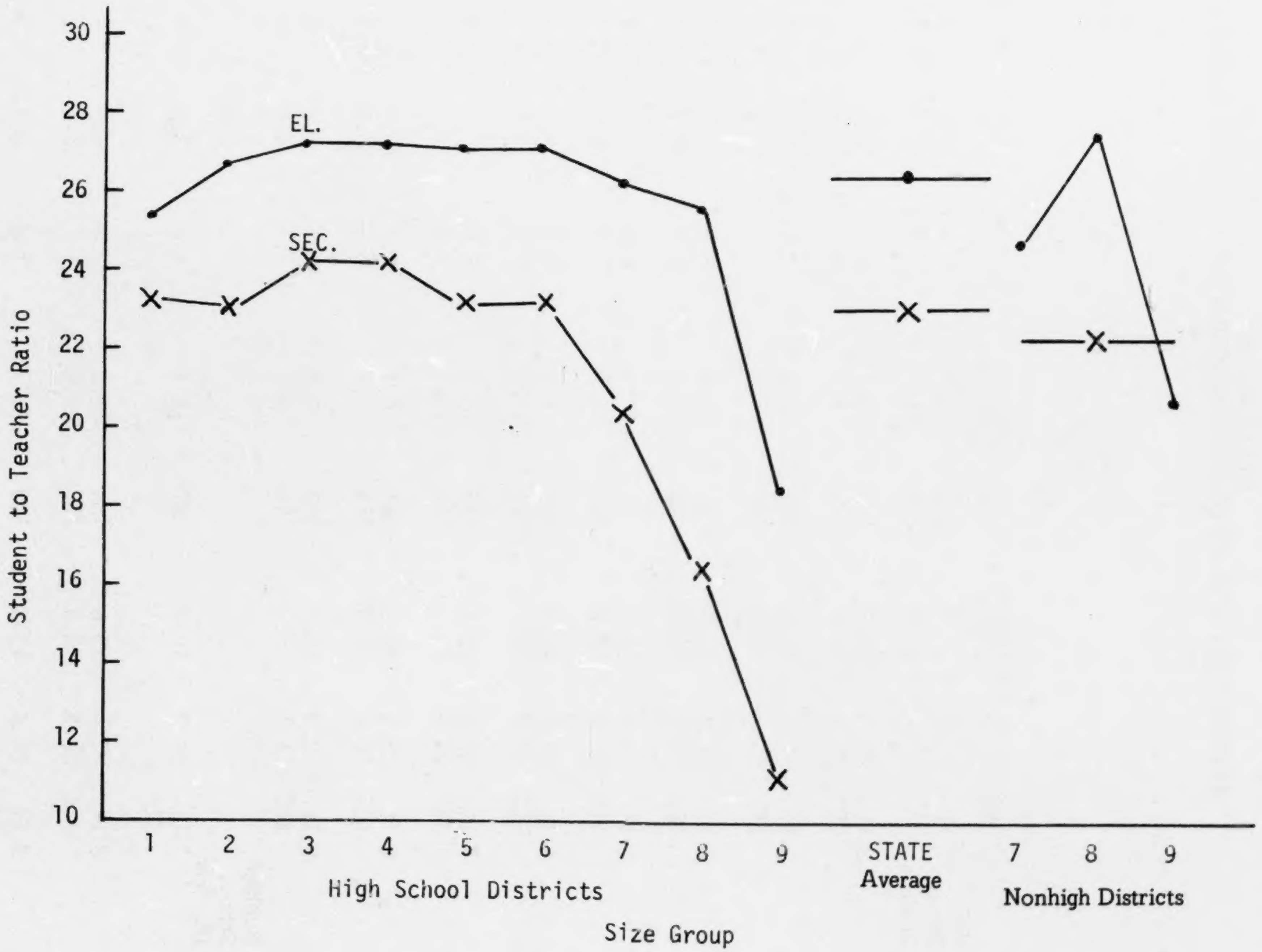


Figure 6

TEACHER TO OTHER CERTIFICATED STAFF RATIOS – SIZE GROUP AVERAGES

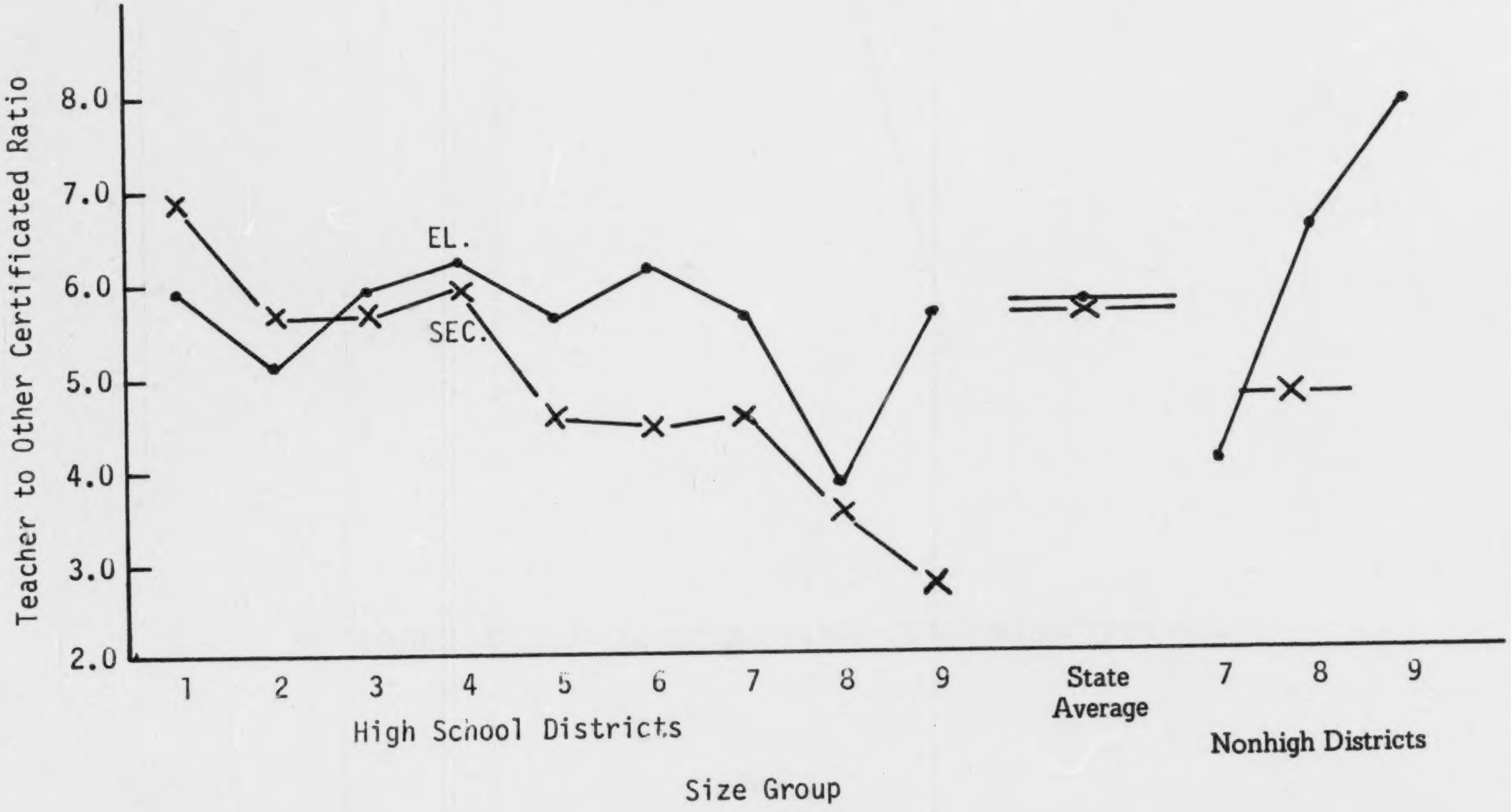
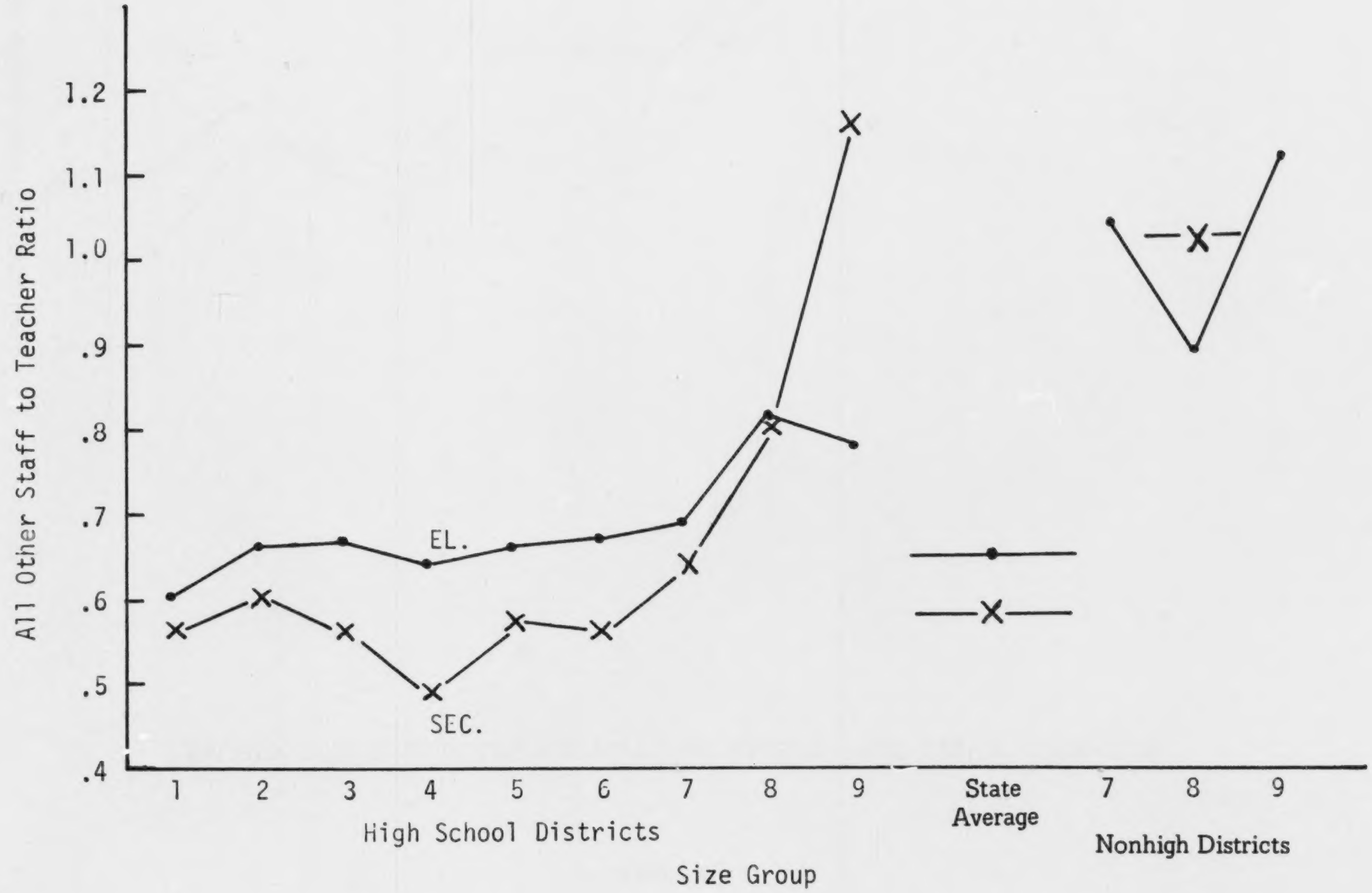


Figure 7

ALL OTHER STAFF TO TEACHER RATIOS – SIZE GROUP AVERAGES



Section 4

TEACHER UTILIZATION

Introduction

Almost half (49.96 percent) of the total appropriation expenditure from general funds in the school districts was spent on teachers' salaries, and 61.9 percent was spent on certificated staff salaries. Full-time classroom teacher's accounted for 58.4 percent of the total staff. Other certificated staff accounted for 15.9 percent, for a state-wide total of 74.3 percent of the total staff in the school districts holding educational certificates.

This section provides information on the numbers of teachers in elementary, junior high, and senior high schools, number of preparations per teacher, student load per class, and average experience and education weighting factors.

It is important to point out that the 326 school districts of the state were not entirely consistent in their interpretation of what should be entered on the "Certificated Personnel Report" (SPI Form F-75). The data from which the statistics of this section were derived came from this report. The inconsistencies were such that the statistical uncertainty associated with the averages obtained was much broader than was the case for the expenditure or staffing data.

The major inconsistency was in reporting of kindergarten and special subjects in the elementary grades, where the total teaching hours per year were occassionally applied to all the students contacted by the teacher. This had the potential result of doubling the true teacher load of pupils in kindergarten, and inflation of the teacher load for special teaching assignments,*e.g.* music, by a factor as large as 6. This type of inconsistency resulted in overestimation of the averages for kindergarten and grades 1-6. The secondary averages were affected, in a few instances, by a similar reporting error. Apparently some data in error by a factor of 10 were recorded. At this time only the results from unedited data are available; data taken from the computer runs intended to determine the extent of editing required. It was determined that 54 districts were affected by this type of gross reporting error in the data for their secondary schools.

A second inconsistency was apparent in the reporting of the hours per year allocated to a teaching assignment (class). Most of the variability here is due to the true difference in the length of class periods in the various schools of the state. Howeve, some of the teachers reported more total hours than the standard 1,080-hour contract, even when hours for "added-stipend" assignments were removed; and some reported less than 1,080 hours. This leads to increased variability of the averages reported below for the secondary grades, and does bias the averages.

The reporting of the basic data for the analysis in this section is consistent enough for comparisons across size groups for all grade levels, but not adequate for obtaining other meaningful averages. (Other priorities demanded that the editing task required to obtain meaningful averages be set aside.)

Conclusions

Although some gross errors in the data inflated the estimates of the teachers' loads in the classroom, a trend of a greater load for the teachers in the smaller districts was apparent from all three indices used. The number of full-time equivalent (FTE) teachers (at 900 contact hours per year) was larger than the actual number of full-time teachers, the relative difference increasing as the size of district diminished. Pupil contact hours per teacher followed the same pattern. Teachers' pupil load per class generally followed the pattern of the pupil-teacher ratio, increasing from groups 1 thru 3, where the greatest load was observed, then declining, with the group 9 average dropping considerably below the level in group 1. All that can be said about the actual difference between pupil-teacher ratio and teacher's classroom load at this time is that the state-wide difference is less than 12 pupils in the elementary grades and less than 7 in the secondary grades.

State-wide, the average number of preparations (difference subjects) which the teacher made (taught) was 3.0 in the junior high schools and 3.3 in the senior high schools. For grades 7-9, the size group averages varied from 2.7 in groups 2 and 3, to 4.8 in group 9. For 10-12, the range was from 2.8 in group 3 to 5.9 in group 9.

The average experience and education level of the teachers decreased with the decreasing size of school districts. This index of the teachers' preparation was most stable across size groups for the elementary teachers, the range being only 10 percent of the state average which fell between the average for the 7-9 and 10-12 grade spans. The preparation level of the elementary teachers was higher than that of the other teachers in groups 7, 8, and 9. The range of the size group averages for junior high teachers was 22 percent of the state-wide average. For the senior high teachers the range of size group averages was almost 40 percent of the state-wide average.

Summary of Results

A. Full-Time Equivalent Teachers

The total number of individual full-time teachers reported in the October 1968 School Staff Report (SPI From F-72-S) was 30,976. When total teacher annual classroom contact hours were divided by 900 hours, (which represent 5 one-hour periods for 180 days) the resulting total full-time equivalent classroom teachers was 32,566, a difference of 1,590 "teachers," (or an increase of 5.1 percent over the actual number of teachers). Neither total includes teachers of the ungraded handicapped or teachers in regular or remedial ungraded classrooms. Teachers of the ungraded handicapped added 1,038 full-time equivalents, and the other teachers in ungraded classrooms added 513 for a grand total of 34,117 FTE teachers.

Table 1 gives the breakdown of the actual number of full-time teachers and certificated staff totals (as reported on SPI Form F-72-S) by size group into elementary, secondary, and school district assignments. The last column gives the number of FTE teachers at 900 hours per year. In Table 2, the average annual pupil contact hours and the ratio of the average hours to 900 hours is given for classroom teachers and certificated staff for each size group. The number of certificated staff used here excludes those assigned to the school district office. The pupil contact hour averages are plotted in Figure 1.

Table 1

NUMBER OF TEACHERS AND CERTIFICATED STAFF
SIZE GROUP BY ELEMENTARY, SECONDARY, AND SCHOOL DISTRICT ASSIGNMENTS
AND TOTAL FULL-TIME EQUIVALENT TEACHERS

Size Group	Teachers			Certificated Staff				Total FTE Teachers
	EL	SEC	Total	EL	SEC	SD	Total	
1	5,080	4,627	9,707	5,943	5,306	9,69	12,218	9,588
2	2,647	2,322	4,969	3,167	2,734	566	6,467	5,203
3	2,813	2,649	5,462	3,292	3,121	489	6,902	5,839
4	2,180	1,886	4,066	2,535	2,205	286	5,026	4,331
5	1,209	924	2,133	1,426	1,129	188	2,743	2,327
6	770	627	1,397	894	775	126	1,795	1,570
7	1,020	838	1,858	1,206	1,023	200	2,429	2,003
8	526	454	980	648	581	72	1,301	1,136
9	276	128	404	317	176	0	493	490
State Total	16,521	14,455	30,976	19,430	17,050	2,896	39,376	32,566

Table 2

PUPIL CONTACT HOURS PER CLASSROOM TEACHER AND PER SCHOOL BUILDING CERTIFICATED STAFF MEMBER

Size Group	Classroom Teacher		Certificated Staff	
	Hours	Hours/900	Hours	Hours/900
1	889.0	0.99	767.1	0.85
2	942.4	1.05	793.6	0.88
3	962.1	1.07	819.4	0.91
4	935.6	1.04	822.3	0.91
5	981.9	1.09	819.7	0.91
6	1,011.6	1.12	846.8	0.94
7	1,008.8	1.12	840.9	0.93
8	1,043.5	1.16	832.1	0.92
9	1,089.3	1.21	892.7	0.99
State Average	943.2	1.05	803.9	0.89

The line plots of Figure 1 provide upper and lower bounds on the actual average pupil contact hours per teacher for each size group. When the actual number of full-time teachers available in the size groups was used, the upper bound on the estimate of teacher load was obtained. Note that only size group 1 was below the arbitrary standard of 900 hours average pupil contact per year. The state average is 43 hours above it, and in group 9, the average rose 189 hours per teacher above the standard. In many districts, certificated personnel who were not counted as full-time teachers (such as principals and health or counseling staff members) did classroom teaching. This was particularly true in the smaller school districts. Consequently, a lower limit on this measure of teacher load, obtained by using the total certificated staff in the school, was deemed necessary. (This lower limit also overcompensates for the reporting error bias discussed above). The state average for the lower limit is 140 hours (equivalent to 0.15 of an FTE teacher) below the state average using full-time teachers. Both groups 1 and 2 are below this average. Although both plots show a general increase with decreasing size of school district, the increase is considerably more pronounced for the full-time teacher contact hours.

In any case, the implication is that there is an increase in teacher load with decreasing school district size.

B. Number of Preparations Per Teacher

Consistent with the increased teacher load in the secondary schools of the smaller school districts, the number of preparations required of these teachers was also above the state average. Table 3 gives the average number of preparations (different subject identification codes) made by the teachers in each size group. Since teacher hours do not enter into these calculations, they are good estimators of the true number of preparations.

The state-wide average was 3 for the junior high grades and 3.3 for the senior high. The switch from below to above the state average comes after group 5 for the junior high schools and after group 4 for the senior high schools.

The junior high size group averages have a range of 2.1 preparations, from less than 3 to almost 5 per teacher. The senior high averages have a range of 3.1, from less than 3 to almost 6 preparations per teacher.

Figure 1

PUPIL CONTACT HOURS PER CLASSROOM TEACHER (T) AND PER SCHOOL BUILDING CERTIFICATED STAFF MEMBER (S) – SIZE GROUP AVERAGES

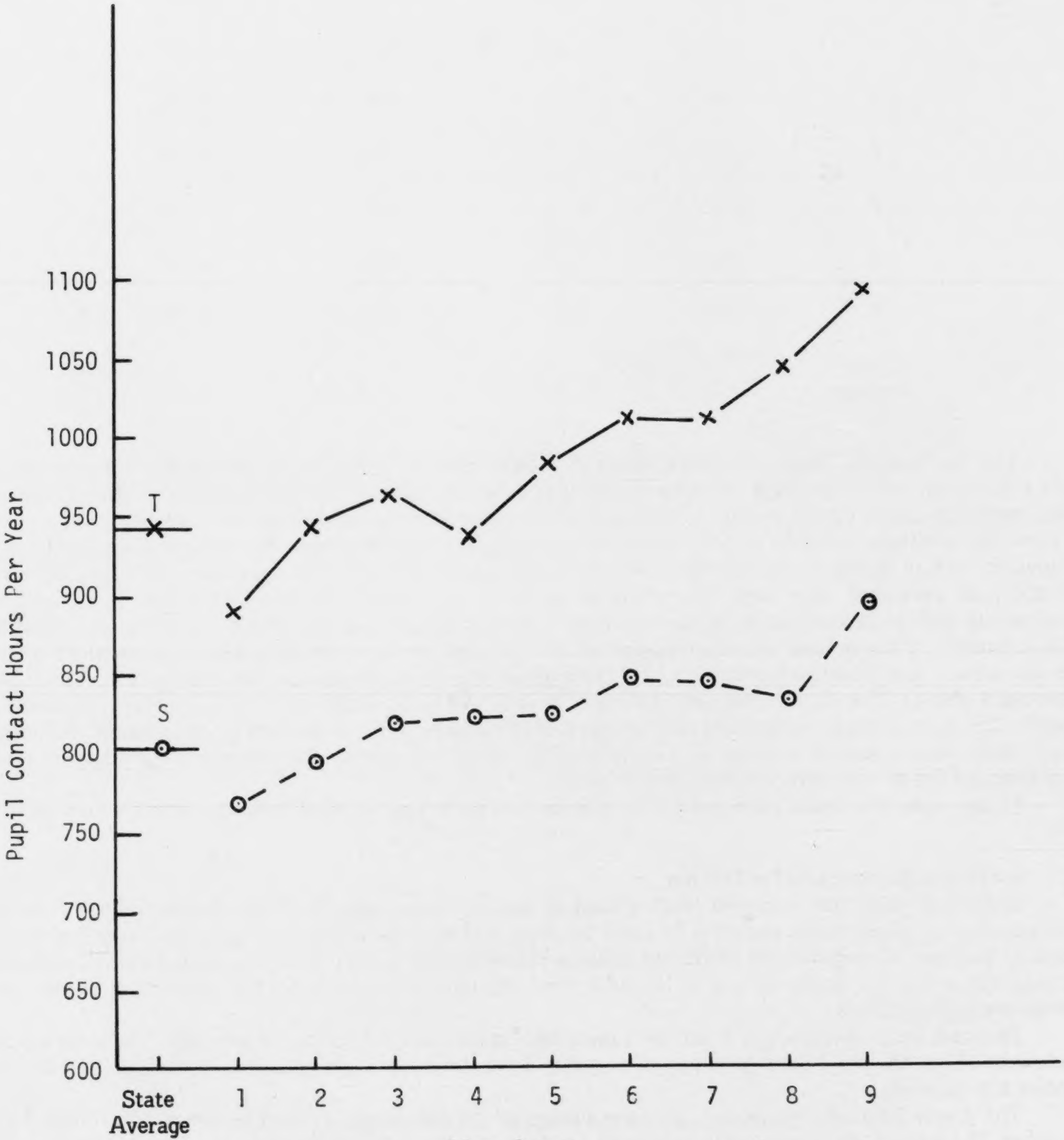


Table 3

NUMBER OF PREPARATIONS PER TEACHER SIZE GROUP BY SECONDARY GRADE LEVEL

	Grade Level	
Size Group	7-9	10-12
1	2.8	3.2
2	2.7	3.1
3	2.7	2.8
4	2.8	2.9
5	2.9	3.5
6	3.3	3.7
7	3.7	4.3
8	4.8	5.4
9	4.5	5.9
State Average	3.0	3.3

C. Pupil Load Per Class

The pupil-teacher ratio is often interpreted as a measure of teacher load. It does not, however, give more than a general indication of the number of students faced by the individual teacher in the classroom. The index of pupil load per class used below is the total student hours divided by the total teacher hours for each grade group in the size group. This estimate of pupils per class is inflated by the reporting errors described above; thus only relative trends across the size groups are to be inferred from it. Table 4 gives these biased estimates and the pupil-teacher ratio, for comparison. The trend shown builds to the heaviest load in group 3 or 4 for all grade spans given then, generally, decreases over the smaller districts. This is the same pattern as the pupil-teacher ratio, except that the districts of group 1 have greater teacher loads than do those of group 2. Editing of the data tape is required to make the teacher load index representative of the actual number of students present in the average class.

D. Experience and Education Level of Teachers

The experience and education levels of the teachers are reduced to a single index by SPI for use in applying the teacher weighting factor in the apportionment formula. This is the index given in Table 5 for the various grade groups and the entire district, by size group. Line plots for the 1-6, 7-9, and 10-12 grade groups are given in Figure 2. These averages are *not* subject to the gross reporting errors mentioned previously.

The significance of the index can be gauged if one knows that the range is from -.020 (for a first-year teacher who has not satisfied the requirements for a provisional certificate) up to 0.190 for a teacher with at least a master's degree and 10 years experience. The 4 education levels are: substandard, provisional, standard, and masters. An index of 0.100 would apply to the following combinations: 4 years of experience and at least a master's degree, 5 to 6 years and a standard certificate, 6 to 7 years and a provisional certificate, 8 years and substandard certification.

The state-wide kindergarten average, 0.089 corresponds to the index for a teacher with a standard certificate and 4 to 5 years' experience. The minimum size group average, 0.055 in group 8 relates to a standard certificate and 2 years' experience, the maximum .097 in group 9 to a standard certificate and 5 years.

The state-wide average for grades 1-6 is higher than for 7-9, and both are considerably less than the senior high average of 0.116. Group 1 was higher than any other size group in all grade levels except kindergarten. This is mainly due to Spokane, whose indices were K, 0.122; 1-6, 0.138; 7-9, 0.144; 10-12, 0.144 and SD, 0.136. Seattle had corresponding indices of: 0.111, 0.116, 0.109, 0.131 and 0.119. The other 4 school districts in size group 1 had school district averages as follows: Highline, 0.104; Bellevue, 0.105; Tacoma, 0.124; Edmonds, 0.089 (1-6 was 0.075, 7-9 was 0.076 and 10-12 was 0.116).

The line plots of Figure 2 show that senior high school teachers had the highest average index through group 6; in the smaller districts, elementary teachers dominated. Junior high school teachers were slightly below elementary teachers in groups 1 thru 3, were even with them in groups 4 and 5, then dropped below them in groups 6 thru 9 where they also remained below the senior high school teachers.

To put these average figures in the perspective of actual years and education, the difference between the smallest index in the 1-12 span, 0.086 (for the 7-9 teachers in group 8) and the largest index, 0.132 (for senior high teachers in group 1) was 0.046. This represents a difference of 3 years of experience or of 2 education levels. In other words, the 0.86 could represent a substandard certificate and 7 years experience; the 0.132, a standard certificate and 7 to 8 years, or a master's and 6 years.

Table 4

TEACHER LOAD PER CLASS AND PUPIL-TEACHER RATIOS SIZE GROUP AVERAGES BY GRADE LEVEL

	Teacher Load			Pupil-Teacher Ratio	
Size Group	1-6	7-9	10-12	1-6	7-12
1	40.9	32.9	30.1	25.4	23.2
2	39.9	31.1	27.7	26.7	23.0
3	44.4	36.2	32.0	27.2	24.2
4	38.4	39.8	30.1	27.2	24.2
5	37.7	31.8	28.0	27.1	23.2
6	38.6	34.5	24.4	27.1	23.2
7	29.6	27.3	18.8	26.1	20.4
8	27.5	22.9	14.0	26.2	16.7
9	20.0	12.4	9.1	19.7	11.1
State Average	39.0	33.0	27.8	26.4	23.0

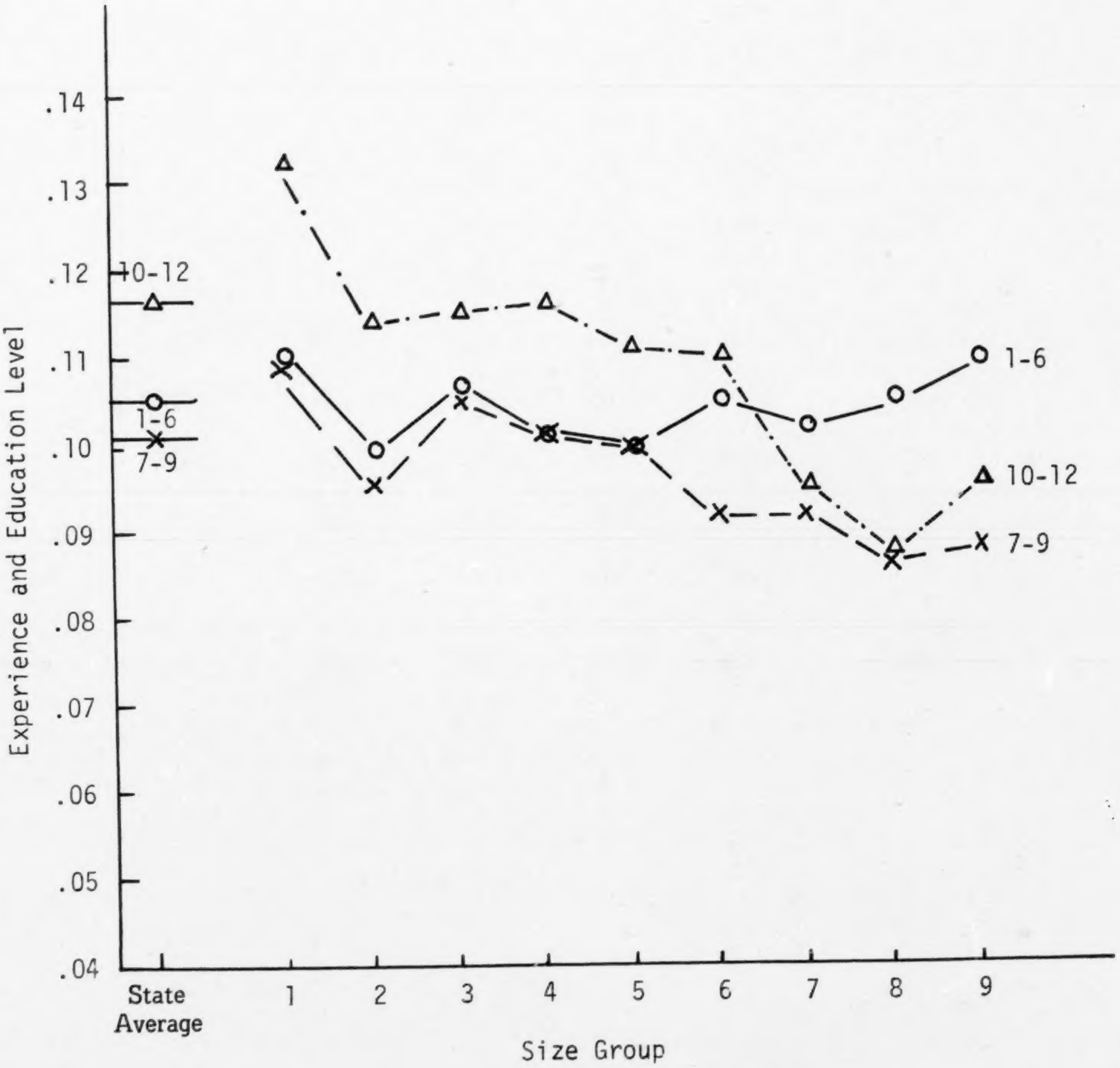
Table 5

TEACHER EXPERIENCE-EDUCATION WEIGHTING FACTORS
SIZE GROUP AVERAGES BY GRADE LEVEL

Size Group	K	1-6	7-9	10-12	SD
1	.091	.110	.108	.132	.116
2	.085	.099	.095	.114	.102
3	.087	.107	.105	.115	.109
4	.096	.101	.101	.116	.106
5	.099	.099	.099	.111	.103
6	.070	.105	.092	.100	.097
7	.095	.102	.092	.095	.095
8	.055	.104	.086	.087	.089
9	.097	.109	.088	.095	.096
State Average	.089	.105	.101	.116	.106

Figure 2

TEACHER EXPERIENCE-EDUCATION WEIGHTING FACTORS
SIZE GROUP AVERAGES BY GRADE LEVEL



Section 5

CURRICULUM OFFERING AND STUDENT PARTICIPATION PATTERNS

Introduction

There were 348 different subjects, out of the 445 listed in "Instructions – F-75 Certificated Personnel Report," (SPI, October 1969), offered in the 1,627 schools of the state during the 1968-69 school year. (The Appendix to this section lists the total potential subject offering.) The secondary subjects were classified into 83 course areas. Each course area was in turn placed in one of 16 curriculum areas. The 37 elementary subjects were classified into 13 course areas and 8 curriculum areas.

This section summarizes the results of the analysis of the statistics, giving the percentage of schools in each size group that offered a particular subject, and the percentage of students in each size group that took each subject. (These percentages are available for each school district in the state.) The statistics are reported for elementary schools (grades K-6) and secondary schools (7-12). The secondary schools are further divided into junior high (7-9) and senior high (10-12).

The source data for this section were the Certificated Personnel Reports collected by SPI on each teacher in the state. The information from these reports used in this section were the *teaching assignments* of each teacher as specified by the SPI code and the number of pupils enrolled in the teaching assignment, reported by grade. The reports were not designed to differentiate between the subject offerings of the school districts. They are, however, the most extensive source of data for this purpose available and do provide good differentiation at the curriculum area level and, in some cases, at the course area level for the secondary schools. Greater emphasis is given to the secondary schools as the differences observed there appeared more clear cut.

Conclusions

Elementary curriculum offering showed very little differentiation among the school districts of the state. Most of the teaching assignments were to "self-contained classrooms" (reported in 96.6 percent of the school districts) or to "team teaching" (reported in 4.3 percent). The differences in assignments to "additional" or "special" subjects is more indicative of staffing structure than curriculum content. Such differentiation does, however, provide insight into the use of specially qualified personnel in the various sizes of districts in the state. The differences observed indicated a general decline in the use of "special" staff as the size of school district decreased.

The most pronounced differences were in the use of special assignments to library instructor, special education and physical education. The use of music and art specialists showed least difference over size groups. Special assignments to mathematics and reading were used relatively more often in the districts with 1,600 to 20,000 pupils.

The secondary schools displayed wide differences in both the number of subjects offered and the percentage of students enrolled in those subjects.

The list of 408 secondary subjects that appears in Table 4 of Appendix A at the end of this section was reduced to 326 subjects by removing those not offered anywhere in the state. There were 219 different subject codes reported for the junior high schools and 318 for the senior high schools. Only 8 subjects were reported offered in junior high schools that were not reported for senior highs.

The number of subjects reported by individual school districts for junior high school students varied from 10 to 135; the most frequently reported number (mode) was about 25, state-wide. Districts with more than 1,600 pupils had a mode of 35. The senior high schools offered from 13 to 206 subjects with a state-wide mode of 45 subjects. Districts with more than 1,600 pupils had a mode of 55, those with fewer than 1,600 pupils had a mode of 35 for the grades 10-12.

After removing from the list those subjects that were reported by fewer than 6 of the 593 junior high schools or by 4 of the 303 senior high schools, there were 127 subjects remaining for junior high school students and 252 for senior high. This difference of 125 subjects was made up of 57 academic subjects, 50 vocational education subjects and 18 personal development subjects.

The sums of the percentages of students enrolled in the 326 subjects offered state-wide were 637 percent for junior high and 520 percent for senior high. This means that the "average" 7-10 grader was enrolled in 6.4 subjects over the year and the "average" 11-12 grader was enrolled in 5.2 subjects. One subject may be added to each of these totals to account for home room or study hall. Junior high students were enrolled in about 3.8 academic subjects and senior high students in 3.1.

A selection of subjects was made based on a percentage of school districts offering a particular subject. Usually the selection criterion was that more than 50 percent of the districts in groups 1 and 2 offered the subject. In order to ensure the inclusion of a subject from the major curriculum areas, this percentage criterion had to be relaxed and occasionally the criterion was applied to the smaller districts, e.g., for agriculture subjects. Using these variable criteria, 47 subjects were selected for junior high schools and 105 subjects for senior high schools. This selection represents an upper limit on the common curriculum offering of the districts of the state for use in defining a "Basic Program of Course Offerings." Enough detail is provided toward the end of this section and Appendix B to serve as a tool in cutting down the curriculum offering.

Summary of Results

A. Elementary Schools

The analysis of curriculum offering in the grades K-6 revealed very little difference among the school districts of the state. This was expected as there are few possibilities for differentiation. The basic curriculum offerings for elementary schools are differentiated by designating the classroom as self-contained, with or without team teaching. Particular subject offerings in the Language, Art, Music Health, and Industrial Arts areas are recorded only if there is a special teacher assigned to the subject, or if a regular classroom teacher teaches the subject as an additional assignment. Consequently, the differences that do appear are more dependent upon the assignment of teachers to particular subject areas outside the basic classroom than they are upon any real differences in the subjects offered.

There were 1,121 buildings offering the grades in the K-6 span in 1968-69. About two thirds (746) of these reported offering kindergarten. The 72 districts which did not offer kindergarten amount to 22 percent of the 326 districts in the state. Essentially all had the basic self-contained classroom and about 4 percent employed team teaching. In the special and additional teaching assignment areas no assignment was recorded state-wide in more than 30 percent of the elementary schools. The most frequent assignments were to special education (28.2 percent) and to library instructor (27.2 percent). Special mathematics teachers were reported in 16.9 percent, and 9.0 percent had special reading teachers. In foreign language, only group 1 reported an appreciable number of buildings offering languages, with 3.9 percent offering French and 3.5 percent offering Spanish. The 3 school districts in group 1 offering foreign languages were Seattle, Highline, and Spokane. In group 2 only Renton and Shoreline reported offering foreign language. Among all size groups, 17 school districts had special or additional assignments to foreign languages. Only Spokane offered French; Shoreline and Renton offered German; thirteen districts offered Spanish; and 5 offered an "other foreign language."

Only 3 districts reported assignments to industrial arts. Bremerton (in 2 of 12 schools) and Olympia (in 1 of 9 schools), both in size group 3, and Royal (in 1 of 2 schools) in size group 7.

A summary of the percentage of buildings reporting the other special or additional subjects in each size group is given in Table 1. The last line of the table gives the arithmetic average of the 11 percentages in each size group as an over-all indication of the use of special and additional teaching assignments. Group 1 was exactly at the state average of 13.9 percent for this over-all measure, group 2 was 8.5 percentage points above it, then there was a steady drop over size groups until group 9 was about 10 percentage points below the state average. The size group percentages for the individual subjects follow this general pattern with only a few exceptions.

B. Secondary Schools

The schools offering grades 7-12 were split into junior high schools (grades 7-9) and senior high schools (grades 10-12). There were 593 junior high schools and 303 senior high schools. The actual number of buildings housing these schools was 704. There were 107 buildings with actual grade spans of 10-12 and 159 with actual grade spans of 7-9. The grade span 9-12 was reported for 143 buildings and 7-12 for 37 buildings. The number of secondary schools with no elementary enrollment was 484. Of the 220 secondary schools which had some elementary enrollment, 50 had a K-8 grade span and 109 had 1-8.

Table 1

PERCENTAGE OF BUILDINGS REPORTING TEACHERS WITH SPECIAL AND ADDITIONAL SUBJECTS

Subject	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Spec. Mathematics	10.5%	20.4%	35.6%	24.7%	24.4%	11.3%	7.1%	1.4%	0%	16.9%
Spec. Reading	3.5	9.2	16.7	14.7	17.1	8.1	8.1	1.4	0	9.0
Art–Additional	10.9	9.8	6.9	10.7	8.5	17.7	8.1	9.8	10.7	10.0
Art–Special	14.0	12.0	2.3	0.7	0	0	1.0	1.4	1.2	5.4
Music–Additional	15.6	22.5	8.0	9.3	24.4	17.7	5.0	15.5	11.9	14.0
Music–Special	22.2	10.6	7.5	2.7	8.5	9.7	11.1	8.5	6.0	11.1
Health–Additional	8.9	10.6	5.2	10.0	8.5	11.3	3.0	8.5	6.0	8.0
PE–Special	14.8	50.7	31.6	23.3	20.7	9.7	10.1	9.9	1.2	21.5
Library Instr.	15.6	59.2	57.5	24.0	12.2	14.5	12.1	14.1	4.8	27.2
Spec. Education (Handicapped)	36.6	35.9	35.1	26.0	24.4	19.4	26.3	14.1	3.6	28.2
Home Tutor	1.6	6.3	0	0.7	0	0	2.0	1.4	0	1.5
Average	14.0%	22.5%	18.8%	13.9%	13.5%	10.9%	8.5%	7.8%	4.1%	13.9%
Total Number of Buildings	257	142	174	150	82	62	99	71	84	1,121

C. Total Subjects Offered

Table 2 indicates the number of subjects reported offered (to the nearest interval of ten) by however many districts in each size group. The total number of subjects used was the total number of district subject codes appearing in all buildings in the district, including elementary schools and special education buildings as well as the secondary schools. Of the total 408 SPI subject codes listed in the instructions for filling out Form F-75, 347 were actually reported as being offered. (When generating the work tape for this analysis there were 4,550 instances where codes were encountered that did not match any code in the SPI list. Such "no-matches" were assigned a code of 9999, and the data associated with them carried under this code. There were about 0.15 no-matches per classroom teacher or an average of 2.8 per building and 14 per school district. These no-matches were caused by either recording errors or use of local school district codes.)

Table 2 demonstrates a definite direct relationship between size of school district and number of subjects offered. The most frequently occurring numbers of subjects (mode) were as follows for each size group: 1 – 205, 2 – 165, 3 – 125 (splitting the bimodal distribution), 4 – 95, 5 – 75, 6 – 75 and over all size groups, 1 thru 6, the mode was 75 subjects. For the high school districts in groups 7-9 the modes were: 7 – 65, 8 – 45, and 9 – 35 subjects. The nonhigh districts in groups 7-9 had modes of: 7 – 15, 8 – 15, 9 – 5.

The breakdown of the number of subjects reported for junior and senior high schools are given in Tables 3 and 4. Both tables (naturally) follow the general trend observed for the school district total subject offerings of Table 2.

The junior high frequencies had a state-wide mode of 25 subjects with 2 districts in group 1 (Seattle and Spokane) offering about 135 subjects and 62 of the 75 nonhigh districts reporting less than 10. The mode for the districts in groups 1 thru 6 was 35 subjects. For the high school districts of groups 7 thru 9 the mode was 25 and for the nonhigh districts it dropped to less than 10 subjects.

The senior high frequencies for number of subjects showed that more subjects were offered students in grades 10-12 (as would be expected). The state-wide mode was 45 subjects. The senior high schools of Seattle reported the most subjects, 206, followed by Spokane with 180. There were 5 high school districts in group 9 that offered fewer than 20 subjects: 3 districts reported 17, Hartline had 14, and Lester had 13. (Hartline had 30 secondary pupils, Lester had 10.) The districts of group 1 are uniformly distributed over the range from 135 to 205 subjects. The mode in group 2 was 125 subjects. The other size groups had most districts offering about the following number of subjects: 3 – 85, 4 – 65, 5 and 6 – 55, 7 – 45, 8 – 35, and 9 – 25 subjects.

These numbers of subjects were derived by counting the number of distinct SPI codes appearing in each school district. This means that they are biased upward for many districts. Since the bias is due to human inconsistencies, and there were more people reporting in the larger districts, the number of subjects reported is more inflated for the larger districts. Seattle, for example, actually offered 177 of the subjects appearing in the F-75 instructions to their 10-12 graders. The number of district codes encountered was 206, a difference of 29 subjects. This difference is the maximum likely. The effect of this bias would be to compact the range of the reported number of subjects offered as given in Tables 2 through 4. It would not appreciably change the order of the school districts on the scale of number of subjects offered. Despite this drawback, these figures are reported since all of the "no matches" are not attributable to reporting errors; some of them are the result of using a local subject code.

The remainder of this section deals exclusively with those subjects for which a match between the subject code of the source date and a subject code of the F-75 instructions was made.

D. Number of Subjects by Curriculum Area

The subjects listed in the F-75 instructions were classified into 16 curriculum areas. These areas are named in Table 5. Table 5 also indicates the total number of subjects from the F-75 list assigned to each area (under "Total No. Subj." column), the numbers of subjects reported in at least one district ("Present") for junior and senior high school students, and the number of subjects that were offered in at least 1 percent of the buildings in the state ("greater than or equal to 1 percent"). The 1 percent cut point represents 5 buildings in junior high and 3 in senior high. The curriculum areas were also classified into three curriculum types to provide a higher level for summarization. The statistics for these types appear as the marginal totals in Table 5.

Table 2

TOTAL NUMBER OF SUBJECTS BY SIZE GROUP

No. of Subjects	Size Group 1	2	3	4	5	6	1-6	7 HS	7 NHS	8 HS	8 NHS	9 HS	9 NHS	7-9 HS	7-9 NHS	State Total
<10											3		57		60	60
10-19									2		6	1	1	1	9	10
20-29										1	4	5		6	4	10
30-39										4	1	13		17	1	18
40-49						1	1	7		22	1	6		35	1	38
50-59						7	7	22		16				38		45
60-69						7	7	24		7				31		39
70-79				2	14	11	27	5						5		32
80-89				5	7	1	13									13
90-99				11	4		15									15
100-109			2	7			9									9
110-119			6	2			8									8
120-129			2	2			4									4
130-139		1	6				7									7
140-149		1	3				4									4
150-159		1	1				2									2
160-169		3					3									3
170-179		2					2									2
180-189		1					1									1
190-199	1						1									1
200-209	2						2									2
210-219																
220-229	1						1									1
230-239	1						1									1
240-289	1*						1									1

---

* Seattle reported 289 subjects

Table 3

NUMBER OF SUBJECTS FOR GRADES 7-9 BY SIZE GROUP

	Size Group															
No. of Subjects	1	2	3	4	5	6	1-6	7 HS	7 NHS	8 HS	8 NHS	9 HS	9 NHS	7-9 HS	7-9 NHS	State Total
<10											5		57		62	62
10-19						1	1	3	2	11	6	12	1	26	9	36
20-29				2	2	16	20	32		36	4	13		81	4	105
30-39			1	13	15	10	39	21		3				24		64
40-49		1	8	11	8		28	2						2		31
50-59		3	4	3			10									10
60-69	1	1	7				9									9
70-79	1	3					4									4
80-89		1					1									1
90-99	1						1									1
100-109	1						1									1
110-119																
120-129																
130-139	2						2									2

Table 4

NUMBER OF SUBJECTS FOR GRADES 10-12
BY SIZE GROUP

No. of Subjects	Size Group 1	2	3	4	5	6	1-6	7 / HS	8 / HS	9 / HS	7-9	State Total
<10												
10-19										5	5	5
20-29									9	17	26	26
30-39								14	31	3	48	48
40-49					2	12	14	36	10		46	60
50-59				3	12	15	30	8			8	39
60-69				11	10		21					21
70-79			2	10	1		13					13
80-89			10	4			14					14
90-99		1	2	1			4					4
100-109		3	6				9					9
110-119												
120-129		4					4					4
130-139	1	1					2					2
140-149	1						1					1
150-159	1						1					1
160-169												
170-179	1						1					1
180-189	1						1					1
190-199												
200-209	1						1					1

Table 5

TOTAL NUMBER OF SUBJECTS OFFERED IN AT LEAST ONE SCHOOL DISTRICT IN AT LEAST 1 PERCENT OF THE DISTRICTS

(By Curriculum Area)

Curriculum Area	Total No. Subj.	Jr. High		Sr. High	
		Present	≥1%	Present	≥1%
Lang. Arts	24	18	15	22	17
Social Studies	30	23	16	28	26
Mathematics	40	23	13	33	29
Science	43	28	14	39	35
Foreign Language	64	22	12	33	20
Total Academic Type	201	114	70	155	127
PE and Health	16	13	8	13	9
Driver's Ed.	1	1	1	1	1
Music	20	16	13	17	16
Arts & Crafts	39	32	19	34	33
Total Personal Development Type	76	62	41	65	59
Home Economics	24	15	9	16	15
Business	46	11	3	37	23
Trades, Tech. & Ind.	39	5	1	24	16
Distributive Ed.	2	0	0	2	2
ROTC	2	1	0	2	1
Agriculture	10	4	3	10	9
Total Vocational Education Type	123	36	16	91	66
Total - All Subjects	400	212	127	311	252
Unclassified	8	7	7	7	7

The total number of subjects reported offered was 212 for grades 7-9 and 311 for grades 10-12. When the subjects that were reported in fewer than 6 junior high buildings or 4 senior high buildings state-wide (less than 1 percent of the buildings) were removed, the offering in junior highs dropped to 127 and in senior highs to 252. Only the "greater than or equal to 1 percent" figures will be discussed. (Given human error, there is the possibility of an actual subject code's having been changed by mistake to another subject code.)

Some noteworthy points to be gleaned from Table 5 are:

1. There were almost twice as many subjects offered in grades 10-12 than in grades 7-9. (252 against 127).

2. About 40 percent of this difference (50 subjects) was accounted for in vocational-type subjects.

3. Another 45 percent (57 subjects) was accounted for in the academic type, mainly in science (21 subjects) and mathematics (16 subjects).

4. Religion is the only subject missing from the unclassified curriculum area. The other subjects in this area are: "No appropriate code listed," study hall, special education, pre-vocational, work experience, home or hospital instruction and, home room.

E. Percentage of Students Enrolled by Course and Subject

The sum of the state-wide enrollment percentages of students enrolled in the subjects within a curriculum area are given in Table 6. These total percentages were calculated by adding the enrollments in each subject within a curriculum area and dividing by the total number of students enrolled state-wide in the grades 7-9 or 10-12. Dividing these total percentages by 100 gives a rough estimate of the number of subjects in each area or type which the typical student took over the school year.

The state-wide percentages of students in the 212 subjects for which junior high enrollment was reported are given in Table 7. The percentages for the 311 senior high subjects are given in Table 8. These tables are organized using the 83 course classifications. Each line of the table gives the percentages for the subjects offered in that course. A dash indicates that the subject was not offered in any district in the state, a "O" that it was offered but had less than 0.0005 percent enrollment. In order to determine the title of the course, a "dictionary" is provided in Appendix A to this section giving the correspondence between the four-digit Battelle Northwest (BNW) subject code and the subject name. The first three digits of the BNW code (which identify the course) are given under the column headed "CODE." The last digit for a particular subject is obtained from the column headings in Tables 7 and 8. For example, in Table 7, the highest percentage appearing in the "LANG. SKILLS" row, 41.9 percent, may cause some interest. To find the subject name, use the four digit code 1124 obtained by putting the column number, 4, at the end of the curriculum area code, 112. Referring to Appendix A, one finds the name "Language Arts" associated with the BNW code 1124.

The following are some implications derived from Table 6.

It can be seen from the "Total Over-all Subjects" row that each junior high student was enrolled in about 6.4 subjects, whereas the senior high student averaged about 5 subjects over the year. This enrollment level does not differentiate between one- and two-semester subjects, nor does it include home room and study hall which were the major contributors to the unclassified enrollment. (See Tables 7 and 8.) Including the unclassified and no-match enrollments would add about one subject to each grade group.

The heaviest concentration of enrollment was found in the academic areas where junior high students[1] were taking 3.8 subjects and senior high students 3.1. The junior high school enrollment in mathematics subjects was twice the senior high level.

In the personal development areas, the junior high students had about double the enrollment of the senior high students in physical education, health, and music. Each student in grades 7-9 took about 2.2 subjects of this type, and each in grades 10-12 took 1.2.

Vocational education courses attracted about one third of the junior high enrollment and three fourths of the senior high. In grades 7-9 the greatest enrollment was in the home economics area, whereas in grades 10-12 the heaviest concentration was in business.

---

[1] **N.B.: Remember that students are counted more than once in the numerator of these percentages, but only once in the denominator.**

The over-all picture of the junior high school student reveals that he spends about 60 percent of his class time in academic subjects, 34 percent in personal development subjects, and about 6 percent in vocational education subjects. The senior high student also spends about 60 percent in academic but only 25 percent in personal development and 15 percent in vocational education.

There are many problems involved in interpreting Tables 7 and 8. These are caused by the degree of differentiation between the subjects within a course or a curriculum area. For example, subject 1111 (with a 51.7 percent enrollment) in the General English course of Table 7 was titled English Language Arts. Subject 1124 in the Language Skills course was titled Language Arts. Much of the differentiation in these tables is a result of calling the same subject by different names. A further complication arises because subjects with different curriculum context may be called by the same name in different districts, or even by different teachers within the same district. So unless the reader is a curriculum expert or has an unusual curiosity about the particular subjects within courses, he is advised to note the course totals (under the column headed "Course") and continue on.

The subjects that were classified as remedial or gifted by Doctors Ford and Kontos ("TSLSC" codes 4 and 6, respectively, in Appendix A) were as follows, with percentage of student participation:

Penmanship and farm mathematics have negligible enrollment (73 and 17 students state-wide). The remedial English language arts subjects enrolled about 8,600 junior high and 4,250 senior high students. Remedial mathematics subjects had about 5,000 students in junior high and 4,800 in senior high. The English subjects for gifted students reported 1,500 junior high students, and 11,900 in senior high.

F. Student Participation–Subject by Size Group

The most commonly offered subjects were selected to provide an initial determination of what might be termed a "Basic Curriculum Offering." A uniform criterion of selection would not have provided a selection of subjects representative of the true diversity of subject offerings. The criterion used was based on the percentage of buildings reporting a subject. The most frequently used criterion was: at least 50 percent of the buildings in groups 1 and 2 offer the subject. Because of the multiplicity of names available for essentially the same subject, this criterion has to be relaxed to ensure the inclusion of subjects from each of the major courses. The subjects selected and the criteria used for selection are listed in Tables 10 and 11 for junior and senior high schools, respectively.

The percentages of students enrolled in the subjects selected were summarized to the curriculum area level for each size group. This summary is given in Tables 12 and 13 for junior and senior high schools, respectively.

Comparison of the "State" columns of Tables 12 and 13 with the percentages of Table 6 reveals that the state-wide enrollment in thy selected subjects accounted for 91 percent of the Total Over-all Subjects for junior high, and 86 percent for senior high schools. The fact that 47 of the 212 (22 percent) junior high subjects and 105 of the 311 (34 percent) senior high subjects were included in the selection taken with 91-percent and 86-percent participation figures indicates the relative dispersion of students in the subjects not selected. Although more than twice as many subjects were selected for senior high students, the total enrollment accounted for was still 5 percent below that accounted for in the junior high schools.

The trend over size groups for the junior high schools for all curriculum areas, except agriculture, generally followed the pattern set by the "Total All Areas" percentages. These percentages showed groups 2, 3, and 4 slightly above group 1, a drop below the state average at group 5, and a considerable drop for group 9. In group 9, only 3 times the number of individual students were reported enrolled in the secondary subjects selected. (Conjecture for future investigation: This may be due to the K-8 structures of many of these schools, with grades 7 and 8 handled as elementary classrooms.) Group 8 reported the greatest percentage of students in vocational education subjects with 70 percent, and group 2 was second with 37 percent.

In Table 13, the size group trend follows a completely different pattern which reflects the greater diversity of subjects offered in the larger school districts. Again, for "All Areas," groups 2 and 3 were slightly above group 1, but all 3 were below the state average. The total percentage participation increased steadily after it passed the state average at group 4. This general trend was maintained for vocational education subjects and academic subjects. The personal development subjects followed essentially the same trend, crossing the state average at group 5 instead of group 4.

The major implications of these size group considerations are:

1. The curriculum offering selected is representative of the actual offering in the various size groups, except for group 9 junior high schools.

2. The selected subjects are more representative of the total offering in the districts with less than 10,000 students than for the larger districts.

3. A basic offering of the 47 junior high subjects, subject to the constraint of 3 preparations per teacher, would require 16 teachers. At a 25 to 1 pupil-teacher ratio, the size of the junior high would have to be 400 students.

4. A basic offering of 105 secondary subjects would require a teaching staff of 35 and 875 pupils, using the same constraints as in item 3.

The (Attachment) tables that follow Attachment provide the percentage participation in each size group for each subject selected. These tables may be used to "prune" the initial selection of subjects.

Table 6

STATE-WIDE SUMMARY OF PERCENTAGE OF STUDENTS ENROLLED IN CURRICULUM AREAS–JUNIOR AND SENIOR HIGH SCHOOLS

	Jr. High		Sr. High	
Curriculum Area	No. Subj.	Percent	No. Subj.	Percent
1. English Language Arts	18	139.7 %	22	97.8%
2. Social Studies	23	82.6	28	92.9
3. Mathematics	23	93.1	33	47.1
4. Science	28	56.0	39	51.6
5. Foreign Language	22	8.2	33	23.1
Total Academic Type	114	379.6 %	155	312.5 %
6. Physical Ed. and Health	13	108.3%	13	58.1
7. Driver Education	1	0.2	1	9.9
8. Music	16	56.1	17	25.9
9. Arts and Crafts	32	54.3	34	35.9
Total Personal Development Type	62	218.9%	65	129.8%
10. Home Economics	15	28.7%	16	20.2%
11. Distributive			2	2.8
12. Business	11	8.4	37	46.8
13. Trades, Tech. and Ind.	5	0.5	24	2.6
14. Military Science	1	0.1	2	0.3
15. Agriculture	4	1.1	10	4.8
Total Vocational Education Type	36	38.8 %	91	77.5 %
Total Over-all Subjects	212	637.3	311	519.8
16. Unclassified	7	54.7	7	66.5
No Match	1	53.1	1	37.0
Total Number of Students	186,741		170,262	

Table 7

PERCENTAGE OF STUDENT PARTICIPATION
JUNIOR HIGH - STATE SUMMARY

Course	Code	1	2	3	4	5	6	7	8	9	Course
Gen'l. Eng.	111	51.7	----	----	.8	.01	----				52.6
Lang. Skills	112	.7	.01	1.7	41.9	2.9	1.2				48.4
Reading	113	24.4	3.7	2.2							30.3
Pub. Speaking	114	3.8	.2	.1	.1						4.2
Journal	115	1.7	----	.2							4.2
Drama	116	----	----								----
											139.7
Social Studies	121	23.8									23.8
Euro-am Hist.	122	20.2	25.2	.7	.8	.01	.04	.3			27.3
Other Hist.	123	3.5	1.4	( )*	----	.6					5.9
Government	124	.6	----	.002	2.1	.2					2.9
Economics	125	.8	.4	----							1.2
Geography	126	19.7	----								19.7
Social Science	127	.1	.03	.4	----						.5
Current Problems	128	.7	.6								1.3
Humanities	129	----									----
											82.6
Gen'l. Math	131	40.7	25.1	.5	.1	1.4	.1	.6			68.5
Algebra	132	18.8	.4	.1	----	.03	----				19.3
Geom. & Trig.	133	.7	----	.001	.03	----					.7
Adv. Math	134	.1	----	----	----	.001					.1
Ball St. Exp.	135	.2	----	----	----	----					.2
U. Md. Exp.	136	----	----	.4	3.1	.7	.02	.02	----	.06	4.3
Misc. Math	137	----	----	----							-----
											93.1
Gen'l. Science	141	32.5	----	.2	.6	2.9					36.2
BSCS Biology	142	.1	.2	.1	.01	----	----				.4
Other Biology	143	2.9	.1	.03	----	----					3.0
Animal Biology	144	.001	.03	----	----	----					.1
Chemistry	145	----	----	.02	----						.1
Physics	146	.01	----	.03	----	.001	2.3	4.8	1.0	---	8.1
Other Physical	147	----	.02	.08	.1						.2
Earth Science	148	2.4	5.3	.01	.02	.2					7.9
											56.0
French	151	----	----	----	.24	.01	----	----	----	----	.3
German	152	1.7	.02	1.1	1.9	.2	.1	.004	.003	----	5.0
Latin	153	.59	----	.41	1.4	.06	.01	----			2.5
Russian	154	----	.003	----	----	----	----	----	----	----	.1
Spanish	155	----	----	.01	.03	.004	.01	----	----	----	.1
Chinese-Japan	156	----	----	----	----	.003	----	----	----		.1
Italian	157	----	----	----	----						----
Norse-Swed.	158	----	----	----	----	----	----	----	( )*	----	----
Other Language	159	.13									.1
											8.2

Total Academic Type - 379.6%

*No subject was assigned to this number.

Table 7—continued

Course	Code	1	2	3	4	5	6	7	8	9	Course
Physical Ed.	211	43.9	40.4	( )*	1.03						85.3
Health Ed.	212	50.7	8.43	7.44							20.9
Sports-Safety	213	.46	.07	----							2.0
Adaptive PE	214	.15			.04	----	.79	.59	.016	----	.1
											108.3
Driver Ed.	221	.24									.2
											.2
Instrumental	231	15.0	.40	2.5	.23	.48	.06				18.7
Vocal Music	232	1.2	1.05	3.5	10.3	.20	.03	----			12.8
Gen'l. Music	233	10.2	1.44	----	.121	----	----	.081			24.6
											56.1
Art	241	19.2	3.15	.38	.12	.02	.03	.12	6.84	1.15	31.0
Gen'l. Ind. Arts	242	5.2	5.3	.06	.03	.012	1.3				11.9
Graphics	243	.38	.08	.023							.5
Drawing	244	----	----	----	----						----
Woodworking	245	3.85	2.61	.18	.001						6.6
Metalworking	246	1.92	.87	.03	----						2.8
Electricity	247	.93	.22	.06							1.2
Mechanical	248	.27	.03	.004	----	.02					.3
											54.3

Total Personal Development Type - 218.9%

Table 7—continued

Course	Code	1	2	3	4	5	6	7	8	9	Course
Home Living 7-8	311	10.1	.26	.51							10.9
Home Ec. - 2 Sem.	312	11.2	1.9	.43	.017	----					13.5
Home Ec. - 1 Sem.	313	1.65	2.2	.005	.018	----	.02	.07	----	.194	4.2
Home Ec. - Combin.	314	----									----
Gainful Home Ec.	315	----	.012	----	----	----	----				.1
											28.7
Distributive Ed.	321	----	----								----

Gen'l. Business	331	----									----
Business Eng.	332	----	.03	----	.01	----					.1
Bus. Relations	333	----	----	----	----						----
Bus. Management	334	----	----	----	----						----
Typewriting	335	7.7	.13	.04	----						7.9
Accounting	336	.004	----	----	----	----	----	----	----	.02	.1
Record Keep.	337	.007									.1
Shorthand	338	.02	----	----	----	----	----	----	----	----	.1
Office Skills	339	----	.004	----	----	----	.002	----	----	----	.1
											8.4
T, T&I Unclass.	341	.27	----	----	----	----					.3
Aircraft	342	----	----	----	----	----	----	----			----
Data Process.	343	----	----								----
Communications	344	----	----								----
Food Service	345	.02	.007	----							.1
Trades	346	----	----	.02	----	.02					.1
Mechanics	347	----	----	----	----	----					----
Home Ec. Commercial	348	----	----	----							----
Hospital Staff	349	----	----	----	----	----	----				----
											.5
Military Sci.	351	.03	----								.1
											.1
Agriculture	361	1.04	.02	----	----	----	----	.05	----	.01	1.1
Farm Math	362	----									----
Total Vocational Education Type - 38.8%											
											1.1
Unclassified	000	5.9	20.9	2.2	.12	.03	.13				29.3
No Match	999									53.1	53.1

Table 8

PERCENTAGE OF STUDENT PARTICIPATION
SENIOR HIGH - STATE SUMMARY

Course	Code	1	2	3	4	5	6	7	8	9	Course
Gen'l. Eng.	111	62.5	.01	.03	5.8	1.1	.05				69.5
Lang. Skills	112	1.5	.05	.13	12.1	.09	1.8				15.7
Reading	113	.93	2.0	.86							3.8
Pub. Speaking	114	4.4	0	0	0						4.4
Journalism	115	2.5	----	1.8							4.3
Drama	116	.08	----								.1
											97.8
Social Studies	121	.57									.6
Euro-am Hist.	122	2.6	33.1	.16	.26	.07	.27				36.5
Other Hist.	123	18.1	.02	.07	.15	.26	.29				18.9
Government	124	.69	3.3	1.1	3.0	.14					8.2
Economics	125	2.3	.04	.10							2.4
Geography	126	.95	----								1.0
Social Science	127	3.6	5.2	.30	.19						9.3
Current Prob.	128	.02	16.0								16.0
Humanities	129	----									----
											92.9
Gen'l. Math	131	.24	2.5	.85	.16	.25	.82	.68			5.5
Algebra	132	8.3	5.2	1.8	.17	2.8	.11				18.4
Geom. & Trig.	133	12.4	.20	1.2	4.3	.24					18.3
Adv. Math	134	2.1	.14	.33	----	.40					3.0
Ball St. Exp.	135	----	----	----	----	.02					.1
U. MD. Exp.	136	----	----	.23	.09	.17	.56	.36	.23	.05	1.7
Misc. Math	137	.009	.008	.014							.1
											47.1
Gen'l. Sci.	141	.89	----	.27	.27	.32					1.8
BSCS Biology	142	6.4	6.7	2.3	.85	.49	.03				16.8
Other Biology	143	11.2	.90	.42	.22	----					12.7
Animal Biology	144	.43	.15	.07	----	.02					.7
Chemistry	145	4.2	.19	4.6	.22						9.2
Physics	146	0	0	5.8	0	0	2.1	1.0	0	0	8.9
Other Physical	147	.03	----	.20	.25						.5
Earth Science	148	.37	.41	.16	.06	.04					1.0
											51.6
French	151	----	----	----	.60	.57	.14	.03	.02	----	1.4
German	152	----	----	.09	3.7	3.6	1.6	.62	.30	----	11.3
Latin	153	.001	----	.008	4.3	3.3	1.2	.24			9.0
Russian	154	----	.05	----	.01	----	----	----	----	----	.1
Spanish	155	----	----	----	.38	.27	.11	----	.02	----	.8
Chinese-Japan	156	.04	.02	.01	----	.06	.07	----	----		.2
Italian	157	.01	.01	----	----						.1
Norse-Swed.	158	.009	.021	----	----	----	----	----	----	----	.1
Other Language	159	.027									.1
											23.1

Total Academic Type - 312.5%

Table 8–continued

Course	Code	1	2	3	4	5	6	7	8	9	Course
Physical Ed.	211	24.4	22.4	----	1.0						47.8
Health Ed.	212	4.0	2.3	2.7							9.0
Sports-Safety	213	.02	.02	----	----	.01	.68	.11	.08	----	.9
Adaptive PE	214	.45									.4
											58.1
Driver Ed.	221	9.9									9.9
											9.9
Instrumental	231	7.4	.55	.93	.23	.19	.03				9.3
Vocal Music	232	.15	.28	1.8	9.5	.82	.14	----			12.7
Gen'l. Music	233	1.6	2.1	.19	----	----	----	----			3.9
											25.9
Art	241	6.3	3.6	.37	.38	1.0	.08	.38	3.5	1.1	16.7
Gen'l. Ind. Arts	242	.46	.62	.12	.06	.04	.42				1.7
Graphics	243	.41	.20	.33							.9
Drawing	244	----	----	----	----	----					----
Woodworking	245	1.3	3.2	2.5	.23						7.2
Metalworking	246	.99	2.3	.70	.24						4.2
Electricity	247	.916	.44	.86							1.7
Mechanical	248	1.3	.72	1.2	.06	.19					3.5
											35.9

Total Personal Development Type - 129.8%

Table 8—continued

Course	Code	1	2	3	4	5	6	7	8	9	Course
Home Living 7-8	311	1.3	----	----							1.3
Home Ec - 2 Sem.	312	2.5	4.1	1.8	.95	----					9.4
Home Ec. - 1 Sem.	313	2.04	2.6	.67	.24	.17	.49	2.03	.023	1.0	9.3
Home Ec. - Combin.	314	----									----
Gainful Home Ec.	315	.11	.05	----	----	----	----				.2
											20.2
Distributive Ed.	321	.78	2.03								2.8
											2.8
Gen'l. Business	331	----									----
Business Eng.	332	.97	.01	.005	.02	.01					1.0
Bus. Relations	333	.02	1.85	.02	.67						2.6
Bus. Management	334	----	.06	.001	----						.1
Typewriting	335	19.9	4.4	.07	.08						24.4
Accounting	336	6.4	.38	.015	----	----	.013	----	.002	1.1	7.9
Record Keep.	337	.65									.6
Shorthand	338	4.4	.65	.19	.2	.01	.01	----	----	----	5.5
Office Skills	339	.005	2.1	.03	.91	.22	1.04	.38	.02	.04	4.7
											46.8
T, T&I Unclass.	341	.36	.004	----	.06	----					.4
Aircraft	342	----	.03	.01	.13	.01	.04	.05	----		.3
Data Process.	343	.15	.05								.2
Communications	344	----	.03								.1
Food Service	345	.07	----	----							.1
Trades	346	.07	.29	.12	.08	.11					.7
Mechanics	347	.47	.06	----	.05	.01					.6
Home Ec. Commercial	348	----	.01	----							.1
Hospital Staff	349	----	----	----	----	.01	----				.1
											2.6
Military Sci.	351	.30	.04								.3
											.3
Agriculture	361	.42	1.3	1.1	.73	.16	.07	.77	.15	.13	4.8
Farm Math	362	.01									

Total Vocational Education Type 77.5%

Unclassified	000	4.8	35.7	1.6	1.0	.42	.10	----	22.9		66.5
No Match	999									37.0	

Table 9

"REMEDIAL" AND "GIFTED" SUBJECTS

Code	Subject	Percent Participation	
	English Language Arts	Jr. High	Sr. High
1112	Remedial Language Arts	None	.01
1121	Remedial Language Arts, Including Speech	0.7	1.5
1123	Study Skills	1.7	.1
1133	Remedial Reading	2.2	.9
	Total Remedial English	4.6	2.5
1114	Honors English	0.8	5.8
1115	Advanced English, College Level	.01	1.1
1116	Advanced English, CEEB	None	.1
	Total Hours	.8	7.0
	Mathematics		
1313	Refresher Arithmetic	0.5	.85
1314	Shop Arithmetic	0.1	.16
1315	Remedial Mathematics	1.4	.25
1316	Consumer Mathematics	.1	.82
1317	Experimental Mathematics for Slow Learners	.6	.68
	Total Mathematics	2.7	2.8
	Business		
3322	Penmanship and Spelling	.03	.01
	Agriculture		
3621	Farm Mathematics	None	.01

Table 10

CRITERIA FOR SUBJECTS SELECTED AS "COMMON"
JUNIOR HIGH (GRADES 7-9)

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
English Language Arts			
English Language Arts	1111	50% in groups 1 or 2	51.7 %
Language Arts	1124	" " "	41.9
Reading	1131	" " "	24.4
Reading - Developmental	1132	" " "	3.7
Reading - Remedial	1133	" " "	2.2
Beginning Speech	1141	" " "	3.8
Journalism - Beginning	1151	" " "	1.7
Total English Language Arts		7 subjects	129.4 %
Social Studies			
Social Studies	1211	50% in groups 1 or 2	23.8 %
Wash. or N.W. History	1221	" " "	20.2
U.S. History	1222	" " "	25.2
World Geography	1261	" " "	19.7
Total Social Studies		4 subjects	88.9 %
Mathematics			
Arithmetic	1311	50% in groups 1 or 2	40.7 %
General Math	1312	" " "	25.1
Algebra	1321	" " "	18.8
Plane Geometry	1331	45% " "	.7
Total Mathematics		4 subjects	85.3 %

Table 10–continued

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
Science			
General Science	1411	50% in groups 1 or 2	32.5 %
Introduction to Physical Science	1467	25% " "	4.8
Earth Science Cur. Project	1481	50% " "	2.4
Earth Science	1482	" " "	5.3
Total Science		4 subjects	45.0 %
Foreign Language			
German, Grade 7	1521	25% in groups 1 or 2	1.7 %
German, Grade 8	1523	" " "	1.1
German (1st year) 9-12	1524	" " "	1.9
Latin (1st year) 9-12	1534	" " "	1.4
Total Foreign Language		4 subjects	6.1 %
Physical and Health Education			
Physical Ed., Boys	2111	50% in groups 1 or 2	43.9 %
Physical Ed., Girls	2112	" " "	40.4
Health Ed., Boys and Girls	2121	20% " "	5.1
Health Ed., Boys	2122	" " "	8.4
Health Ed., Girls	2123	" " "	7.4
Total Physical and Health Education		5 subjects	105.2 %
Music			
Band	2311	50% in groups 1 or 2	15.0%
Orchestra	2313	" " "	2.5
Boys' Chorus	2322	30% " "	1.1
Girls' Chorus	2323	" " "	3.5
Mixed Chorus	2324	" " "	10.3
General Music	2331	50% " "	10.3
Total Music		6 subjects	42.7 %

Table 10–continued

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
Arts and Crafts			
Art General, Intro.	2411	40% in groups 1 or 2	19.2%
Art General, Adv.	2412	" " "	3.2
Art-Crafts, Intro.	2418	" " "	6.8
Gen. Ind. Arts (3 areas or less)	2421	25% " "	5.2
Gen. Ind. Arts (4 areas or more)	2422	" " "	5.3
Intro. Woodworking	2451	" " "	3.9
General Woodworking	2452	" " "	2.6
Intro. Metalworking	2461	" " "	1.9
Total Arts and Crafts		8 subjects	48.1%
Home Economics			
Home Living, Girls	3111	50% in groups 1 or 2	10.1%
First Year Gen. Econ.	3121	" " "	11.2
Textile and Clothing	3132	20% " "	2.2
Total Home Economics		3 subjects	23.5%
Business			
Typewriting, (first year)	3351	50% in groups 1 or 2	7.7%
Agriculture			
Agricultural, Science I	3611	20% in groups 7, 8, or 9	1.0%

Table 11

CRITERIA FOR SUBJECTS SELECTED AS "COMMON" HIGH SCHOOL (GRADES 10-12)

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
English Language Arts			
English Language Arts	1111	50% in groups 1 or 2	62.5%
Honors, Enriched, etc., English	1114	" " "	5.8
Remedial Lang. Arts	1121	25% " "	1.5
Language Arts	1124	" " "	12.1
Library Science	1126	" " "	1.8
Reading	1131	" " "	.9
Reading - Developmental	1132	" " "	2.0
Beginning Speech	1141	50% " "	4.7
Debate	1143	" " "	.8
Journalism - Beginning	1151	" " "	2.5
Publications	1153	" " "	1.8
Total Language Arts		11 subjects	96.4%
Social Studies			
Wash. or N.W. History	1221	50% in groups 1 or 2	2.6%
U.S. History	1222	" " "	33.1
World History	1231	" " "	18.1
Economics	1251	25% " "	2.3
World Geography	1261	40% in groups 7, 8, or 9	1.0
Sociology	1271	50% in groups 1 or 2	3.6
Psychology	1272	" " "	5.2
Contemporary Problems	1282	" " "	15.9
Total Social Studies		8 subjects	81.8%

Table 11–continued

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
Mathematics			
General Math	1312	25% in groups 1 or 2	2.5%
Refresher Arithmetic	1313	" " "	.9
Algebra	1321	40% " "	8.3
Algebra 3	1322	" " "	5.2
Algebra 4	1323	" " "	1.8
Integ. Algebra and Trig.	1325	" " "	2.8
Plane Geometry	1331	" " "	12.5
Trigonometry	1333	" " "	1.2
Integ. Plane and Solid Geometry	1334	" " "	4.3
Advanced or Higher Mathematics	1341	" " "	2.1
Calculus	1343	" " "	.3
Total Mathematics		11 subjects	41.9%
Science			
Biol. Science Cur., Green	1421	40% in groups 1 or 2	6.4%
Biol. Science Cur., Yellow	1422	" " "	6.7
Biology, Intro.	1431	" " "	11.2
Biology Advanced	1432	" " "	.9
Chemistry, Chem. Ed. Mat.	1451	50% " "	4.2
Chemistry, Intro.	1453	" " "	4.6
Physics	1461	25% " "	2.0
Physics, Intro.	1463	" " "	1.7
Physical Science	1466	" " "	1.5
Total Science		9 subjects	39.2%

Table 11–continued

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
Foreigh Language			
French (first year)	1514	40% in groups 1 or 2	.6 %
French (second year)	1515	" " "	.6
German (first year)	1524	50% " "	3.7
German (second year)	1525	" " "	3.6
German (third year)	1526	" " "	1.5
German (fourth year)	1527	" " "	.6
Latin (first year)	1534	40% " "	4.3
Latin (second year)	1535	" " "	3.3
Latin (third year)	1536	" " "	1.2
Latin (fourth year)	1537	" " "	.2
Spanish (first year)	1554	30% " "	.4
Spanish (second year)	1555	" " "	.3
Total Foreign Language		12 subjects	20.3%
Physical and Health Education			
Physical Ed., Boys	2111	50% in groups 1 or 2	24.4%
Physical Ed., Girls	2112	" " "	22.5
Health Ed., Boys and Girls	2121	" " "	4.0
Health Ed., Boys	2122	" " "	2.3
Health Ed., Girls	2123	" " "	2.7
Total Physical and Health Education		5 subjects	55.9%
Music			
Band	2311	50% in groups 1 or 2	7.4%
Orchestra	2313	" " "	.9
Girls Chorus	2323	" " "	1.8
Mixed Chorus	2324	" " "	9.5
Ensembles	2325	" " "	.8
Music Survey or Appreciation	2332	20% " "	.5
Music Theory or Harmony	2333	" " "	.3
Total Music		7 subjects	21.2%

Table 11—continued

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
Arts and Crafts			
Art General, Introd.	2411	50% in groups 1 or 2	6.3 %
Art General, Adv.	2412	" " "	3.6
Commercial Arts	2415	" " "	1.0
Arts-Crafts, Introd.	2418	" " "	3.5
General (3 areas or less)	2421	20% in groups 7, 8 or 9	.5
General (4 areas or more)	2422	" " "	.6
General Woodworking	2452	50% in groups 1 or 2	3.2
Advanced Woodworking	2453	" " "	2.4
General Metalworking	2462	40% " "	2.3
Advanced Metalworking	2463	" " "	.7
Electricity	2471	" " "	.9
Electronics	2473	" " "	.9
Total Arts and Crafts		12 subjects	25.9 %
Home Economics			
Home Living, Girls	3111	30% in groups 1 or 2	1.3 %
First-Year Gen. Home Econ.	3121	" " "	2.5
Second-Year Gen. Home Econ.	3122	" " "	4.1
Third-Year Gen. Home Econ.	3123	" " "	1.8
Nutrition & Food	3131	50% " "	2.0
Textile and Clothing	3132	" " "	2.6
Personal and Family Relations	3137	" " "	2.0
Total Home Economics		7 subjects	16.3 %

Table 11–continued

Subject	Code	Percent Offering Criterion	Percent State-wide Participation
Business			
Business English	3321	50% in groups 1 or 2	1.0%
Business Law	3332	" " "	1.9
Typewriting, (first year)	3351	" " "	19.9
Typewriting, (second year)	3352	" " "	4.4
Bookkeeping and Acc., (first year)	3361	30% " "	6.4
Bookkeeping and Acc., (second year)	3362	" " "	.4
Business Mathematics	3369	" " "	1.1
Record Keeping	3371	40% " "	.7
Shorthand, (first year)	3381	30% " "	4.4
Shorthand, (second year)	3382	" " "	.6
Office Machines	3392	" " "	2.1
Secretarial Office Procedures	3394	" " "	.9
Clerical Office Procedures	3396	" " "	1.0
Total Business		13 subjects	44.8%
Agriculture			
Agric. Science I	3611	20% for State	.4
Agric. Science II	3612	" " "	1.3
Agric. Science III	3613	" " "	1.1
Agric. Science IV	3614	" " "	.7
Farm Mech. and/or Shop	3617	" " "	.8
Total Agriculture		5 subjects	4.3%

Table 12

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS WITHIN CURRICULUM AREA JUNIOR HIGH - BY SIZE GROUP

Curriculum Area	No. of Subj.	Size Group									
		1	2	3	4	5	6	7	8	9	State Average
Language Arts	7	123	143	147	150	109	108	93	97	53	129
Social Studies	4	98	90	91	90	85	75	63	68	49	89
Mathematics	4	90	87	93	82	77	80	70	70	46	85
Science	4	46	45	45	48	37	48	43	49	30	45
Foreign Language	4	9	7	6	4	4	1	2	2	1	6
Total Academic	23	366	372	382	374	312	312	271	286	179	354
PE and Health	5	99	105	121	112	109	96	87	98	49	105
Music	6	48	44	43	42	35	32	31	46	33	43
Arts and Crafts	8	54	49	49	52	41	32	31	34	30	48
Total Personal Dev.	19	201	198	213	206	185	160	149	178	112	196
Home Economics	3	25	26	22	24	21	19	21	24	17	24
Business (Typing)	1	7	11	10	6	3	7	6	11	7	8
Agriculture (1st Yr.)	1	.05	0.0	.5	1.4	1.9	4.1	4.4	5.5	1.1	1
Total Voc. Ed.	5	32	37	32	31	26	30	31	40	25	33
Total All Areas	47	599	607	627	611	523	502	451	504	316	583
Total Number of Students		57468	28912	34498	25901	13199	9025	10954	5416	1368	186741

Table 13

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS WITHIN CURRICULUM AREA SENIOR HIGH - BY SIZE GROUP

Curriculum Area	No. of Subj.	Size Group									
		1	2	3	4	5	6	7	8	9	State Average
Language Arts	11	93	100	90	97	99	111	106	100	119	96
Social Studies	8	81	76	70	84	90	100	98	110	93	82
Mathematics	11	37	45	47	44	40	40	40	42	35	42
Science	9	33	36	41	44	46	42	45	54	48	39
Language	12	20	23	23	21	19	15	14	18	16	20
Total Academic	51	264	280	271	290	294	308	304	334	311	279
PE and Health	5	63	58	52	51	51	47	50	56	71	56
Music	7	15	19	21	22	26	33	34	45	38	21
Arts and Crafts	11	23	25	24	27	31	34	32	33	33	26
Total Personal Dev.	29	101	102	97	100	108	114	116	134	142	103
Home Economics	7	17	16	14	16	17	19	21	23	24	16
Business (Typing)	13	40	36	43	48	54	55	57	64	62	45
Agriculture (1st Yr.)	5	0	1	4	6	7	17	14	19	9	4
Total Voc. Ed.	25	57	53	61	70	78	91	92	106	95	65
Total All Areas	105	422	435	429	460	480	513	512	574	548	447
Total Number of Students		54419	26395	31817	22779	11750	8007	10143	4089	863	170,262

Section 5

Appendix A

CLASSIFICATIONS OF SUBJECTS

270/271

CLASSIFICATIONS OF SUBJECTS

The instructions for filling out SPI Form F-75, Certificated Personnel Report, issued by SPI in October 1969, contain listings of subject codes and corresponding subject names for teaching assignments. The elementary codes are given on page 8 and page 11. The secondary codes are given on pages 16 through 26.

Two coding structures have been added to the codes provided by SPI. The first, developed by Dr. Paul Ford and Dr. George Kontos, classifies 400 secondary subjects into 8 categories based on the major objective of the subject. The categories and their definitions are as follows.

Categories

1. Academic Curriculum Offerings
2. Personal Development Curriculum Offerings
3. Occupational Curriculum Offerings

Special Education Curriculum Offerings:

4. Remedial
5. Handicapped
6. Gifted
7. Curriculum Offerings for the Culturally Different
8. Other

Definitions

Academic Curriculum Offerings

This category includes all subjects which are commonly considered to be required for college entrance; e.g., English, Math, Foreign Language, Fine Arts, Science, and Social Science.

Occupational Curriculum Offerings

Includes all subjects whose major objective is to provide skills necessary for a specific career.

Personal Development Curriculum Offerings

Includes all subjects whose major objective is providing knowledge and skills useful for leisure-time activity and/or acquainting students with a general career choice.

Special Education Curriculum Offerings

Includes all subjects specifically designed to meet the unique needs for students unable to perform adequately through regular programs of instruction.

Culturally-Different Curriculum Offerings

Includes all subjects that may be designed to meet the needs of students belonging to or wishing to know more about a minority culture.

Other

Those courses whose classification does not fit a category or, depending upon the judgment of the user, may fit more than one category not included in the above definitions.

The second structure, developed by Dr. James Johnston, of Battelle-Northwest (BNW), uses a 4-digit code to classify the 408 secondary subjects into 3 "curriculum types" (first digit), 16 "curriculum areas" (second digit), and 83 "courses." The 37 elementary subjects were classified into 7 curriculum areas and 12 courses. The last digit is used to identify the subject within a course. The 3 curriculum type codes generally correspond to the first three categories of the first structure. (The implicit differentiation of categories based on regular or special types of students of the first coding structure is not considered in the 4-digit code).

Table 1 gives the structure of the code for the elementary subjects and Table 2, for the secondary subjects. Tables 3 and 4 give the "dictionary" relating the various codes. The column headed "TSLSC" in Table 4 gives the one-digit codes assigned by Drs. Ford and Kontos.

Table 1

NUMBER OF SUBJECTS IN EACH ELEMENTARY COURSE CLASSIFICATION

Curriculum Area	Number of Subjects	Number of Courses	Number of Subjects Per Course 1	Number of Subjects Per Course 2
1. Basic	11	2	9	2
2. Language	8	2	4	4
3. Art	2	2	1	1
4. Music	4	2	1	3
5. Health	3	2	1	2
6. Industrial Art	2	2	1	1
7. Other	7	1	7	
Total	37	12		

1-2: Academic (First digit of code is 5)

3-6: Personal Development (First digit of code is 6)

7: Other (First digit of code is 7)

Table 2

NUMBER OF SUBJECTS IN EACH SECONDARY COURSE CLASSIFICATION

Curriculum Area		Number of Subjects	Number of Courses	Number of Subjects Per Course								
				1	2	3	4	5	6	7	8	9
1.	English Language Arts	24	6	6	6	3	4	3	2			
2.	Social Studies	30	9	1	6	6	5	3	2	4	2	1
3.	Mathematics	40	7	7	6	5	5	5	9	3		
4.	Science	43	8	5	6	5	5	4	9	4	5	
5.	Foreign Language	64	9	9	9	7	9	9	8	4	8	1
6.	Physical and Health Ed.	16	4	3	3	9	1					
7.	Driver's Ed. 4901	1	1	1								
8.	Music	20	3	6	7	7						
9.	Arts and Crafts	39	8	9	6	3	5	4	4	3	5	
10.	Home Economics	24	5	3	5	9	1	6				
11.	Business	46	9	1	5	4	4	4	9	1	9	9
12.	Trades, Technical and Industrial	39	9	5	8	2	2	3	5	5	3	6
13.	Distributive	2	1	2								
14.	Military Science	2	1	2								
15.	Agriculture	10	2	9	1							
	Totals	400	82									
16.	Unclassified	8	1	8								

1-5: Academic (First digit of code is 1) 201 Subjects, 39 Courses.

6-9: Personal Development (First digit is 2) 76 Subjects, 16 Courses.

10-15: Occupational (First digit is 3) 123 Subjects, 27 Courses.

Table 3

ELEMENTARY SUBJECT CODE LIST

BNW	F-75	SUBJECT TITLE
		BASIC CURRICULUM AREA
BASIC CLASSROOM		
5110	EL00	Kindergarten
*5111	EL01	First
5112	EL02	Second
5113	EL03	Third
5114	EL04	Fourth
5115	EL05	Fifth
5116	EL06	Sixth
5117	EL07	Seventh
5118	EL08	Eighth
SPECIAL		
5131	EL29	Mathematics
5132	EL34	Reading
		LANGUAGE CURRICULUM AREA
LANGUAGE ADDITIONAL		
5221	EL14	French
5222	EL15	German
5223	EL16	Spanish
5224	EL17	Other Foreign Languages
5231	EL21	French
LANGUAGE SPECIAL		
5232	EL22	German
5233	EL35	Spanish
5234	EL38	Other Foreign Languages
		ART CURRICULUM AREA
ART ADDITIONAL		
6121	EL10	Art

---

* Very few school districts used the EL01-EL08 codes in 1968-69. These codes are more appropriately defined as: EL01 (5111) "Self Contained Classroom" and EL02 (5112) "Team Teaching," to correspond with page 7 of the F-75 instructions.

Table 3—continued

BNW	F-75	SUBJECT TITLE
ART SPECIAL		
6131	EL20	Art
		MUSIC CURRICULUM AREA
MUSIC ADDITIONAL		
6221	EL13	Music
MUSIC SPECIAL		
6231	EL30	Music, General
6232	EL31	Music, Instrumental
6233	EL32	Music, Vocal
		HEALTH CURRICULUM AREA
HEALTH ADDITIONAL		
6321	EL18	Health Instruction
HEALTH SPECIAL		
6331	EL24	Health Instruction
6332	EL33	Physical Education
		INDUSTRIAL ARTS CURRICULUM AREA
INDUSTRIAL ARTS ADDITIONAL		
6421	EL19	Industrial Arts, K-6
INDUSTRIAL ARTS SPECIAL		
6431	EL27	Industrial Arts, K-6
		OTHER
OTHER SPECIAL		
7111	EL23	Head Start - Nursery
7112	EL25	Helping Teacher
7113	EL26	Home Tutor
7114	EL28	Library Instructor
7115	EL36	Special Education
7116	EL37	Television Teaching
7117	EL39	Other

Table 4

SECONDARY SUBJECT CODE LIST

TSLSC	BNW	F-75	SUBJECT TITLE
		LANGUAGE ARTS CURRICULUM AREA	
	GENERAL ENGLISH		
1	1111	0401	Language Arts
4	1112	0402	Remedial English
1	1113	0405	English as a Second Language
6	1114	0410	Honors English
6	1115	0412	College English
6	1116	0413	CEEB English
	LANGUAGE SKILLS		
4	1121	0509	Remedial English
1	1122	0515	English as a Second Language
1	1123	0522	Study Skills
1	1124	0525	Language Arts
1	1125	0530	Spelling
1	1126	0540	Library Science
	READING		
1	1131	0601	Reading
1	1132	0614	Reading-Development
4	1133	0615	Reading-Remedial
	PUBLIC SPEAKING		
1	1141	0802	Beginning Speech
1	1142	0803	Advanced Speech
1	1143	0811	Debate
3	1144	0815	Radio-TV
	JOURNALISM		
1	1151	1001	Journalism - Beginning
1	1152	1002	Journalism - Advanced
8	1153	1020	Publications
	DRAMATICS AND STAGECRAFT		
8	1161	1201	Drama
8	1162	1205	Stagecraft

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
			SOCIAL STUDIES CURRICULUM AREA
	SOCIAL STUDIES		
1	1211	1409	Social Studies
	EUROPEAN-AMERICAN HISTORY		
1	1221	1401	Northwest History
1	1222	1402	United States History
1	1223	1404	European History
1	1224	1407	North American History
7	1225	1408	South American History
7	1226	1411	Russian History
	OTHER HISTORY		
1	1231	1403	World History
7	1232	1405	Asian History
7	1234	1406	African History
1	1235	1410	Ancient History
7	1236	1413	Negro History
1	1237	1414	Far East History
	GOVERNMENT		
1	1241	1703	State and Local Government
1	1242	1709	National Government
1	1243	1710	International Affairs
1	1244	1711	Civics
1	1245	1712	Comparative Government
	ECONOMICS		
1	1251	1801	Economics
1	1252	1805	Economic Geography
1	1253	1806	Consumer Economics
	GEOGRAPHY		
1	1261	1902	World Geography
1	1262	1915	North American Geography
	SOCIAL SCIENCES		
1	1271	2101	Sociology
1	1272	2121	Psychology

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
	SOCIAL SCIENCES—Continued		
1	1273	2123	Anthropology
1	1274	2125	Philosophy
	CURRENT PROBLEMS		
2	1281	1412	Vocations
1	1282	2401	Contemporary Problems
	HUMANITIES		
1	1291	2601	Humanities
			MATHEMATICS CURRICULUM AREA
GENERAL MATHEMATICS			
1	1311	2801	Arithmetic
1	1312	2803	General Math
4	1313	2805	Refresher Arithmetic
4	1314	2806	Shop Arithmetic
4	1315	2807	Remedial Math
4	1316	2808	Consumer Mathematics
4	1317	2809	Experimental Math Courses for Slow Learners
ALGEBRA			
1	1321	2901	Algebra
1	1322	2904	Algebra 3, 3rd Semester
1	1323	2905	Algebra 4, 4th Semester
1	1324	2906	Algebra 5, 5th Semester
1	1325	2907	Integrated Algebra and Trigonometry
1	1326	2908	Integrated Algebra and Geometry
GEOMETRY AND TRIGONOMETRY			
1	1331	3001	Plane Geometry
1	1332	3002	Solid Geometry
1	1333	3003	Trigonometry
1	1334	3004	Integrated Plane and Solid Geometry
1	1335	3005	Solid Geometry and Trigonometry

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
			ADVANCED OR HIGHER MATHEMATICS
1	1341	3101	Advanced or Higher Mathematics
1	1342	3103	Analytic Geometry
1	1343	3104	Calculus
1	1344	3105	Integrated Analytic Geometry and Calculus
1	1345	3106	Probability and Statistics
			EXPERIMENTAL MATH PROGRAMS
1	1351	3111	Ball State Teacher's Coll. Exper., Arith. Concepts and Skills
1	1352	3112	Ball State Teacher's Coll. Exper., Introduction to Math
1	1353	3113	Ball State Teacher's College, Experiment Algebra I
1	1354	3114	Ball State Teacher's College Experiment, Geometry
1	1355	3115	Ball State Teacher's College Experiment, Algebra II
1	1361	3121	Univ. of Maryland Math Project, Math for Jr. High, Book I
1	1362	3122	Univ. of Maryland Math Project, Math for Jr. High, Book II
1	1363	3131	UICSM
1	1364	3141	School Math Study Group
1	1365	3143	School Math Study Group, Algebra
1	1366	3144	School Math Study Group, Geometry
1	1367	3145	School Math Study Group, Algebra 3,4 Advanced
1	1368	3146	Math Study Group, Grade 12 – Trig., Math Anal. and Elem. Function
1	1369	3147	Math Seminar
			MISCELLANEOUS MATHEMATICS
2	1371	3201	Navigation
2	1372	3202	Slide Rule
2	1373	3203	Surveying

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
			SCIENCE CURRICULUM AREA
			GENERAL SCIENCE
1	1411	3301	General Science
1	1412	3302	I.S.C.S. - Intermediate Science Curriculum Study
1	1413	3304	Aerospace Science (including Aviation Science)
1	1414	3306	Introduction to Secondary Science
1	1415	3308	Other Science
			BIOLOGICAL SCIENCES
1	1421	3410	BSCS - Biological Sciences Curriculum Study, Green Version
1	1422	3411	BSCS - Biological Sciences Curriculum Study, Yellow Version
1	1423	3412	BSCS - Biological Sciences Curriculum Study, Blue Version
1	1424	3413	BSCS - Biological Sciences Curriculum Study, Special Materials
1	1425	3414	BSCS - Biological Sciences Curriculum Study, Second Course
1	1426	3415	BSCS - Laboratory Blocks
1	1431	3420	Biology, Introductory (other than BSCS)
1	1432	3425	Biology, Advanced, second year (other than BSCS)
1	1433	3430	Botany
1	1434	3431	Forestry
1	1435	3432	Physiology, Plant
			ANIMAL BIOLOGY
1	1441	3440	Zoology
1	1442	3441	Physiology, Animal
1	1443	3445	Physiology, Plant and Animal
1	1444	3450	Bacteriology
1	1445	3455	Anatomy
			CHEMISTRY
1	1451	3510	Chemistry, CHEM Study - Chemical Education Material Study
1	1452	3511	Chemistry, CBA - Chemical Bond Approach
1	1453	3512	Chemistry, Introductory (Other than CHEM Study and CBA)
1	1454	3513	Chemistry, Advanced (second year)

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
	PHYSICS		
1	1461	3520	Physics, PSSC - Physical Science Study Committee
1	1462	3521	Physics, Harvard Project
1	1463	3522	Physics, Introductory (other than PSSC & Harvard)
1	1464	3523	Physics, Advanced (second year)
1	1465	3528	Physics - Chemistry, Combined
1	1466	3530	Physical Science
1	1467	3531	IPS - Introductory Physical Science
1	1468	3532	IME – Interaction of Matter and Energy
1	1469	3533	Q.P.S. - Quantitative Physical Science
	OTHER PHYSICAL SCIENCES		
1	1471	3534	ECCP - Engineering Concepts Curriculum Project
1	1472	3535	SSSP - Secondary School Science Project (Princeton
1	1473	3590	Electronics
1	1474	3595	Photography
	EARTH SCIENCE		
1	1481	3610	ESCP - Earth Science Curriculum Project
1	1482	3611	Earth Science (other than ESCP)
1	1483	3613	Geology
1	1484	3620	Astronomy
1	1485	3630	Oceanography
			FOREIGN LANGUAGE CURRICULUM AREA
	FRENCH		
1	1511	3705	French, Grade 7
1	1512	3710	French, Grade 8
1	1513	3720	French, Grade 9 Continuing from Grade 7 and/or Grade 8
1	1514	3730	French (First Year) Grades 9-12
1	1515	3740	French (Second Year)
1	1516	3750	French (Third Year)
1	1517	3760	French (Fourth Year)
1	1518	3770	French (Fifth Year)
1	1519	3780	French (Sixth Year)

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
	GERMAN		
1	1521	3805	German, Grade 7
1	1522	3810	German, Grade 8
1	1523	3820	German, Grade 9 Continuing from Grade 7 and/or Grade 8
1	1524	3830	German (First Year) Grades 9-12
1	1525	3840	German (Second Year)
1	1526	3850	German (Third Year)
1	1527	3860	German (Fourth Year)
1	1528	3870	German (Fifth Year)
1	1529	3880	German (Sixth Year)
	LATIN		
1	1531	3905	Latin, Grade 7
1	1532	3910	Latin, Grade 8
1	1533	3920	Latin, Grade 9 Continuing from Grade 7 and/or Grade 8
1	1534	3930	Latin (First Year) Grades 9-12
1	1535	3940	Latin (Second Year)
1	1536	3950	Latin (Third Year)
1	1537	3960	Latin (Fourth Year)
	RUSSIAN		
1	1541	4005	Russian, Grade 7
1	1542	4010	Russian, Grade 8
1	1543	4020	Russian, Grade 9 Continuing from Grade 7 and/or Grade 8
1	1544	4030	Russian (First Year) Grades 9-12
1	1545	4040	Russian (Second Year)
1	1546	4050	Russian (Third Year)
1	1547	4060	Russian (Fourth Year)
1	1548	4070	Russian (Fifth Year)
1	1549	4080	Russian (Sixth Year)
	SPANISH		
1	1551	4105	Spanish, Grade 7
1	1552	4110	Spanish, Grade 8
1	1553	4120	Spanish, Grade 9 Continuing from Grade 7 and/or Grade 8
1	1554	4130	Spanish (First Year) Grades 9-12
1	1555	4140	Spanish (Second Year)
1	1556	4150	Spanish (Third Year)
1	1557	4160	Spanish (Fourth Year)
1	1558	4170	Spanish (Fifth Year)
1	1559	4180	Spanish (Sixth Year)

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
CHINESE - JAPANESE			
1	1561	4401	Chinese (First Year) Grades 9-12
1	1562	4402	Chinese (Second Year)
1	1563	4403	Chinese (Third Year)
1	1564	4404	Chinese (Fourth Year)
1	1565	4421	Japanese (First Year) Grades 9-12
1	1566	4422	Japanese (Second Year)
1	1567	4423	Japanese (Third Year)
1	1568	4424	Japanese (Fourth Year)
ITALIAN			
1	1571	4411	Italian (First Year) Grades 9-12
1	1572	4412	Italian (Second Year)
1	1573	4413	Italian (Third Year)
1	1574	4414	Italian (Fourth Year)
NORSE - SWEDISH			
1	1581	4431	Norse (First Year) Grades 9-12
1	1582	4432	Norse (Second Year)
1	1583	4433	Norse (Third Year)
1	1584	4434	Norse (Fourth Year)
1	1585	4441	Swedish (First Year) Grades 9-12
1	1586	4442	Swedish (Second Year)
1	1587	4443	Swedish (Third Year)
1	1589	4444	Swedish (Fourth Year)
OTHER FOREIGN LANGUAGE			
1	1591	4490	Other Foreign Language
PHYSICAL AND HEALTH EDUCATION CURRICULUM AREA			
PHYSICAL EDUCATION			
2	2111	4501	Physical Education, Boys
2	2112	4502	Physical Education, Girls
2	2114	4515	Physical Education, Boys and Girls
HEALTH EDUCATION			
2	2121	4701	Health Education, Boys and Girls
2	2122	4702	Health Education, Boys
2	2123	4703	Health Education, Girls

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
SPORTS - SAFETY			
2	2131	5018	Intramural Athletics, Boys
2	2132	5020	Intramural Athletics, Girls
2	2133	5023	Outdoor Education
2	2134	5024	Outdoor Recreation Including Camping, Hiking, etc.
2	2135	5025	Winter Sports
2	2136	5026	Aquatics
2	2137	5027	Medical Self Help and/or First Aid
2	2138	5028	Safety Education
2	2139	5029	Lifetime Sports (Bowling, Archery, Golf, etc.)
ADAPTIVE PHYSICAL EDUCATION			
2	2141	5007	Adaptive Physical Education
DRIVER EDUCATION CURRICULUM AREA			
DRIVER EDUCATION			
2	2211	4901	Driver Education, State Approved Program
MUSIC CURRICULUM AREA			
INSTRUMENTAL MUSIC			
2	2311	5151	Band
2	2312	5152	Stage Band
2	2313	5153	Orchestra
2	2314	5154	Ensembles
2	2315	5155	Sectional Instrumental Instruction
2	2316	5156	Individual Instrumental Instruction
VOCAL MUSIC			
2	2321	5351	Classroom Music - Vocal
2	2322	5352	Boys Chorus
2	2323	5353	Girls Chorus
2	2324	5354	Mixed Chorus or Choir
2	2325	5355	Ensembles
2	2326	5356	Voice Class
2	2327	5357	Individual Voice Instruction

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
GENERAL MUSIC			
1	2331	5651	General Music
1	2332	5652	Music Survey or Appreciation
2	2333	5653	Music Theory or Harmony
2	2334	5654	Orchestration
2	2335	5655	Arranging
2	2336	5656	Conducting
2	2337	5657	Class Piano
ARTS AND CRAFTS CURRICULUM AREA			
ART			
1	2411	5750	Art General, Introductory
1	2412	5760	Art General, Advanced
1	2413	5770	Art History and/or Appreciation
3	2414	5850	Graphic Arts
3	2415	5860	Commercial Arts
2	2416	5870	Print Making
2	2417	5880	Photography and/or Film Making
2	2418	5950	Art - Crafts, Introductory
2	2419	5960	Art - Crafts, Advanced
GENERAL INDUSTRIAL ARTS			
1	2421	6251	General - Limited 3 Areas or Less
2	2422	6252	General - 4 Areas or More
2	2423	6253	General - Girls
4	2424	6254	Applied Shop Mathematics
4	2425	6255	Applied Shop Science
2	2426	6256	Industrial Crafts (For Others See Art Listing)
GRAPHIC			
3	2431	6351	Graphic Arts
3	2432	6352	Printing
2	2433	6353	Photography
DRAWING			
2	2441	6451	Introductory Technical Drawing
3	2442	6452	Technical Drawing
3	2443	6453	Advanced Technical Drawing
3	2444	6454	Architectural Drawing
3	2445	6455	Specialized Drawing

Table 4–continued

TSLSC	BNW	F-75	SUBJECT TITLE
	WOODWORKING		
2	2451	6551	Introductory Woodworking
3	2452	6552	General Woodworking
3	2453	6553	Advanced Woodworking
3	2454	6554	Specialized Woodworking
	METALWORKING		
2	2461	6651	Introductory Metalworking
3	2462	6652	General Metalworking
3	2463	6653	Advanced Metalworking
3	2464	6654	Specialized Metalworking
	ELECTRICITY		
3	2471	6751	Electricity
3	2472	6752	Electricity and Electronics
3	2473	6753	Electronics
	MECHANICAL		
3	2481	6851	Power Mechanics
3	2482	6852	Gas Engines
3	2483	6853	Auto Mechanics
3	2484	6854	Specialized Auto Mechanics
2	2485	6855	Home Mechanics
	HOME ECONOMICS CURRICULUM AREA		
	HOME LIVING		
2	3111	6901	Home Living, Girls Only, Grades 7 and 8
2	3112	6902	Home Living, Boys Only, Grades 7 and 8
2	3113	6903	Home Living, Boys and Girls, Grades 7 and 8
	HOME ECONOMICS YEAR COURSES		
2	3121	7001	First Year General Home Economics
2	3122	7011	Second Year General Home Economics
2	3123	7021	Third Year General Home Economics
2	3124	7031	Fourth Year General Home Economics
5	3125	7041	Home Economics, Special Education

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
			HOME ECONOMICS SEMESTER COURSES
2	3131	7101	Nutrition and Food
2	3132	7111	Textile and Clothing
2	3133	7121	Child Development
2	3134	7131	Personal and Family Money Management
2	3135	7141	Management
2	3136	7151	Housing
2	3137	7161	Personal and Family Relationships
2	3138	7171	Family Health
2	3139	7181	Boys' Homemaking
			HOME ECONOMICS COMBINATION
2	3141	7189	Combination of Above Areas
			GAINFUL HOME ECONOMICS
3	3151	7191	Care and Guidance of Children
3	3152	7192	Clothing Management, Production and Service
3	3153	7193	Food Management, Production and Service
3	3154	7194	Institutional and Home Management
3	3155	7195	Teacher Aide
3	3156	7196	Other
			DISTRIBUTIVE EDUCATION CURRICULUM AREA
			DISTRIBUTIVE EDUCATION
3	3211	7201	Distributive Education Preparatory Program
3	3212	7211	Distributive Education Cooperative Program
			BUSINESS CURRICULUM AREA
			GENERAL BUSINESS
2	3311	7301	General Business, Business Principles, General Business Survey, Introduction to Business
			BUSINESS ENGLISH
2	3321	7401	Business English, Business Communications, Secretarial English
4	3322	7404	Penmanship and Spelling

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
	BUSINESS ENGLISH Continued		
3	3323	7406	Technical Report Writing
3	3324	7407	Vocabulary Development
3	3325	7420	Speech for Business
	BUSINESS RELATIONS		
3	3331	7408	Business Ethics
3	3332	7409	Business Law
3	3333	7412	Business Relations
3	3334	7415	Economics, Economic Geography, Consumer Economics
	BUSINESS MANAGEMENT		
3	3341	7417	Personnel Management
3	3342	7418	Principles of Management
3	3343	7419	Small Business Management
3	3344	7421	Pre-employment
	TYPEWRITING		
2	3351	7501	Typewriting, First Year
3	3352	7505	Typewriting, Second Year
3	3353	7507	Typewriting, Statistical
3	3354	7508	Typewriting, Speedbuilding
	ACCOUNTING		
3	3361	7601	Bookkeeping and Accounting, First Year; Accounting, First Year
3	3362	7605	Bookkeeping and Accounting, Second Year; Accounting, Second Year
3	3363	7607	Accounting, Third Year
3	3364	7609	Accounting, Advanced Theory
3	3365	7610	Accounting, Cost
3	3366	7611	Accounting, Income Tax
3	3367	7612	Accounting, Payroll
3	3368	7613	Accounting, Secretarial
3	3369	7615	Business Mathematics, Business Arithmetic, Accounting Mathematics
	RECORD KEEPING		
3	3371	7617	Recordkeeping

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
SHORTHAND			
3	3381	7701	Shorthand, First Year
3	3382	7705	Shorthand, Second Year
3	3383	7707	Shorthand Transcription
3	3384	7709	Stenography
3	3385	7711	Machine Transcription
3	3386	7712	Machine Shorthand
3	3387	7714	Notehand
3	3388	7718	Shorthand, Legal
3	3389	7719	Shorthand, Medical
OFFICE SKILLS			
3	3391	7801	Machine Accounting, Machine Posting
3	3392	7803	Office Machines
3	3393	7806	Filing
3	3394	7807	(Classroom Lab., Secretarial) Secretarial Office Procedures, Office Simulation-Model Laboratory
3	3395	7813	(Cooperative Office Education, Secretarial) Secretarial Office Procedures, Office Simulation-Model Laboratory
3	3396	7815	(Classroom Lab., Clerical) Clerical Office Procedures, Office Simulation-Model Laboratory (non-shorthand)
3	3397	7816	(Cooperative Office Education, Clerical) Clerical Office Procedures, Office Simulation-Model Laboratory (nonshorthand)
3	3398	7818	Business Graphics
3	3399	8001	Keypunch
TECHNICAL AND INDUSTRY CURRICULUM AREA			
TRADES, TECHNICAL AND INDUSTRIES			
3	3411	8101	Drafting
3	3412	8112	Forester Helping
3	3413	8136	Commercial Art
3	3414	8138	Occupation Related
3	3415	8139	Fishing Trades

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
	AIRCRAFT		
3	3421	8102	Aircraft Mechanic - Airframe and Powerplant
3	3422	8103	Aircraft Machine Operation
3	3423	8104	Aircraft Template Making
3	3424	8105	Aircraft Assembly Mechanic
3	3425	8106	Aircraft Jig Building
3	3426	8107	Aircraft Plastic and Plaster Patternmaking
3	3427	8108	Commercial Pilot
3	3428	8137	Aircraft Mockup Mechanics
	DATA PROCESSING		
3	3431	8109	Introduction to Data Processing
3	3432	8110	Programming, Computer
	COMMUNICATIONS		
3	3441	8111	Announcing-Directing, Radio and Television
3	3442	8127	Graphic Communications and Production
	FOOD SERVICES		
3	3451	8113	Food Services
3	3452	8125	Food Trades
3	3453	8128	Baking
	TRADES		
3	3461	8114	Machinist
3	3462	8115	Welding
3	3463	8116	Carpentry
3	3464	8117	Cabinet Making
3	3465	8135	Electrical/Electronics
	MECHANICS		
3	3471	8118	Automotive Mechanics
3	3472	8119	Auto Body Repairing
3	3473	8120	Office Machines Repairing
3	3474	8121	Maintenance Mechanics
3	3475	8122	Industrial Mechanics
	COMMERCIAL HOME ECONOMICS		
3	3481	8123	Commercial Sewing and Designing
3	3482	8124	Cosmetology
3	3483	8126	Needle Trades - Dressmaking

Table 4—continued

TSLSC	BNW	F-75	SUBJECT TITLE
	HOSPITAL STAFF		
3	3491	8129	Medical Assistance
3	3492	8130	Medical Records Clerk
3	3493	8131	Physician's Receptionist
3	3494	8132	Hospital Receiving Clerk
3	3495	8133	Nursing Aides and Orderlies
3	3496	8134	Ward Clerks
			MILITARY SCIENCE CURRICULUM AREA
	MILITARY SCIENCE		
	3511	0301	R.O.T.C.
	3512	0302	Cadets
			AGRICULTURE CURRICULUM AREA
	AGRICULTURE		
3	3611	0201	Agricultural Science I, First Year
3	3612	0202	Agricultural Science II, Second Year
3	3613	0203	Agricultural Science III, Third Year
3	3614	0204	Agricultural Science IV, Fourth Year
3	3615	0205	Ornamental Horticulture
3	3616	0206	Landscaping
3	3617	0207	Farm Mechanics and/or Farm Shop
3	3618	0208	Farm Power Mechanics
3	3619	0210	Forestry
	FARM MATHEMATICS		
4	3621	0209	Farm Mathematics
			UNCLASSIFIED
	UNCLASSIFIED		
	0001	0001	No Appropriate Code Listed
	0002	0002	Study Hall
	0003	0003	Special Education
	0004	0004	Prevocational
	0005	0005	Work Experience
	0006	0006	Home or Hospital Instruction
	0007	0007	Religion
	0008	0008	Home Room or Roll Room

Section 5

Appendix B

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS BY SIZE GROUP

294

Table 1

PERCENTAGE OF STUDENTS ENROLLED
IN SELECTED SUBJECTS
JUNIOR HIGH–ENGLISH LANGUAGE ARTS

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
English Language Arts	40.0	42.0	63.2	65.4	49.8	62.1	61.0	59.6	42.9	51.7
Language Arts	53.8	58.8	42.3	31.2	31.5	17.6	10.9	14.4	3.7	41.9
Reading	18.6	27.1	29.6	38.4	19.5	21.4	13.7	15.2	4.9	24.4
Reading - Developmental	4.7	5.3	2.5	3.7	2.3	.6	3.8	1.0	1.1	3.7
Reading - Remedial	1.1	2.6	2.5	3.5	2.9	3.5	.9	2.8	.0	2.2
Beginning Speech	3.1	4.4	4.6	6.4	2.3	1.5	1.9	2.4	.0	3.8
Journalism - Beginning	1.8	2.4	2.1	1.3	.9	1.6	.5	1.1	.4	1.7
Total percent for curriculum area	123.1	142.6	146.8	149.9	109.2	108.3	92.7	96.5	53.0	129.4
Average percent of 7 subjects	17.6	20.4	21.0	21.4	15.6	15.5	13.2	13.8	7.6	18.5

Table 2

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH–SOCIAL STUDIES

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
Social Studies	17.9	34.2	24.6	24.1	25.5	24.0	23.1	25.0	15.2	23.8
State of Washington or Northwest History	21.9	15.8	18.2	21.2	20.7	23.1	21.0	25.0	21.6	20.2
United States' History	34.2	20.6	25.8	26.9	18.3	17.7	9.4	10.0	7.4	25.2
World Geography	23.7	19.0	22.8	18.0	20.8	10.0	9.4	8.3	4.8	19.7
Total percent for curriculum area	97.7	89.6	91.4	90.2	85.3	74.8	62.9	68.3	49.0	88.9
Average percent of 4 subjects	24.4	22.4	22.9	22.6	21.3	18.7	15.7	17.1	12.2	22.2

Table 3

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH–MATHEMATICS

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Arithmetic	48.3	45.1	47.6	33.2	28.2	24.5	24.1	27.2	15.1	40.7
General Math	22.2	23.9	23.2	29.5	29.4	37.5	26.0	23.2	11.7	25.1
Algebra	18.8	16.4	21.4	18.3	18.6	18.1	19.5	19.6	18.2	18.8
Plane Geometry	.3	1.4	1.0	1.4	.3	.03	.4	.06	.7	.7
Total percent for curriculum area	89.6	86.8	93.2	82.4	76.5	80.1	70.0	70.1	45.7	85.3
Average percent of 4 subjects	22.4	21.7	23.3	20.6	19.1	20.0	17.5	17.5	11.4	21.3

Table 4

PERCENTAGE OF STUDENTS ENROLLED
IN SELECTED SUBJECTS
JUNIOR HIGH–SCIENCE

Subject Title	Size Group									State
	1	2	3	4	5	6	7	8	9	Average
General Science	28.2	37.0	30.3	35.7	29.1	40.9	34.6	45.5	28.7	32.5
Introductory Physical Science	9.7	.4	4.9	4.8	.5	2.1	1.0	.0	.0	4.8
Earth Science Curriculum Project	3.6	2.3	2.8	1.6	1.8	.2	1.8	.0	.0	2.4
Earth Science	4.3	4.8	7.0	5.9	5.9	4.9	5.5	3.9	.8	5.3
Total percent for curriculum area	45.8	44.5	45.0	48.0	37.3	48.1	42.9	49.4	29.5	45.0
Average percent of 4 subjects	11.5	11.1	11.2	12.0	9.3	12.0	10.7	12.4	7.4	11.2

Table 5

PERCENTAGE OF STUDENTS ENROLLED
IN SELECTED SUBJECTS
JUNIOR HIGH–FOREIGN LANGUAGE

	Size Group									State
Subject Title	1	2	3	4	5	6	7	8	9	Average
German, Grade 7	3.2	2.1	1.6	.6	.6	.3	.0	.0	.0	1.7
German, Grade 8	2.1	.7	1.4	.4	.3	.0	.0	.5	.0	1.1
German (First Year) Grades 9-12	2.5	2.7	1.7	1.0	1.8	.4	1.0	1.3	.6	1.9
Latin (First Year) Grades 9-12	1.3	1.6	1.4	1.9	1.7	.6	.5	.2	.5	1.4
Total percent for curriculum area	9.1	7.1	6.1	3.9	4.4	1.3	1.5	2.0	1.1	6.1
Average percent of 4 subjects	2.3	1.8	1.5	1.0	1.1	.3	.4	.5	.3	1.5

Table 6

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH–PHYSICAL AND HEALTH EDUCATION

	Size Group									State
Subject Title	1	2	3	4	5	6	7	8	9	Average
Physical Education, Boys	44.9	47.7	47.9	41.6	37.3	39.9	37.2	40.1	19.1	43.9
Physical Education, Girls	39.3	45.3	42.4	42.7	39.9	36.4	31.1	34.5	17.2	40.4
Health Education, Boys and Girls	4.2	2.1	4.3	9.7	11.1	2.4	4.5	5.6	1.0	5.1
Health Education, Boys	5.7	5.6	14.6	9.2	10.3	10.0	6.2	7.8	5.6	8.4
Health Education, Girls	5.0	4.0	12.2	8.5	9.9	6.9	8.0	9.9	6.4	7.4
Total percent for curriculum area	99.1	104.7	121.4	111.7	108.5	95.6	87.0	97.9	49.3	105.2
Average percent of 5 subjects	19.8	20.9	24.3	22.3	21.7	19.1	17.4	19.6	9.9	21.0

Table 7

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH–MUSIC

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Band	12.1	16.4	15.7	16.6	15.1	18.0	15.8	19.9	14.3	15.0
Orchestra	3.6	3.1	3.7	1.3	.0	.6	.0	.4	.0	2.5
Boys Chorus	1.5	1.7	.8	.8	.3	.0	.4	.3	1.6	1.1
Girls Chorus	4.6	5.6	1.9	4.1	1.1	.3	1.7	1.7	3.0	3.5
Mixed Chorus or Choir	9.7	8.9	11.1	9.6	13.3	9.0	11.2	15.0	10.3	10.3
General Music	16.2	7.8	9.9	9.4	5.4	3.6	1.8	8.3	4.2	10.3
Total percent for curriculum area	47.7	43.5	43.1	41.8	35.2	31.5	30.9	45.6	33.4	42.7
Average percent of 6 subjects	8.0	7.2	7.2	7.0	5.9	5.3	5.2	7.6	5.6	7.1

Table 8

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH—ARTS AND CRAFTS

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
Art General, Introductory	23.7	18.9	17.7	20.2	15.7	13.4	11.5	14.5	11.6	19.2
Art General, Advanced	4.2	3.0	3.4	4.3	1.5	.8	.5	.02	.07	3.2
Art - Crafts, Introductory	6.2	8.2	7.9	7.4	6.6	5.1	4.9	4.9	5.0	6.8
General Industrial Arts Limited 3 Areas or Less	2.1	7.1	8.3	8.5	3.2	2.6	3.6	5.2	1.8	5.2
General Industrial Arts 4 Areas or More	8.4	6.3	3.6	4.0	4.4	.8	1.8	1.7	2.3	5.3
Introductory Woodworking	3.6	2.1	4.0	4.5	3.7	6.3	5.4	5.2	5.8	3.9
General Woodworking	3.1	2.1	2.7	1.2	3.9	2.4	3.3	2.0	3.1	2.6
Introductory Metalworking	3.1	1.7	1.6	1.9	1.6	.5	.1	.0	.4	1.9
Total percent for curriculum area	54.4	49.4	49.2	52.0	40.6	31.9	31.1	33.5	30.1	48.1
Average percent of 8 subjects	6.8	6.2	6.2	6.5	5.1	4.0	3.9	4.2	3.8	6.0

Table 9

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH–HOME ECONOMICS

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Home Living, Girls Only Grades 7 and 8	12.2	13.3	9.8	7.2	7.5	5.1	6.6	8.5	8.5	10.1
First Year General Home Economics	7.8	11.4	11.2	13.9	13.3	14.3	14.8	14.2	8.0	11.2
Textile and Clothing	4.9	1.1	1.0	2.4	.2	.0	.0	.8	.7	2.2
Total percent for curriculum area	24.9	25.8	22.0	23.5	21.0	19.4	21.4	23.5	17.2	23.5
Average percent of 3 subjects	8.3	8.6	2.8	7.8	7.0	6.5	7.1	7.8	5.7	7.8
Typewriting, First Year	6.5	11.4	10.2	5.9	3.4	6.9	5.8	10.9	6.9	7.7
Agricultural Science I First Year	.05	.0	.5	1.4	1.9	4.1	4.4	5.5	1.1	1.0

Table 10

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS JUNIOR HIGH–UNCLASSIFIED

Subject Title	Size Group									State
	1	2	3	4	5	6	7	8	9	Average
Other (No appropriate code)	9.8	1.6	1.3	14.7	1.0	1.0	2.4	3.0	.5	5.9
Study Hall	8.7	8.7	22.6	53.1	23.9	24.3	27.7	21.6	20.2	20.8
Home or Hospital Instruction	.0	.0	.01	.0	.0	2.2	.4	.0	.0	.1
Total percent for curriculum area	18.5	10.3	23.9	67.8	24.9	27.5	30.5	24.6	20.7	26.8
Average percent of 3 subjects	6.2	3.4	8.0	22.6	8.3	9.2	10.2	8.2	6.9	8.9

Table 11

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–ENGLISH LANGUAGE ARTS

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
English Language Arts	47.6	60.7	58.7	76.1	78.4	84.6	82.4	84.4	87.9	62.5
Honors, Enriched, Accelerated or High-Achievement English	3.8	4.6	9.3	8.0	4.1	9.5	4.5	1.8	.7	5.8
Remedial Language Arts, Including Speech	1.4	.9	2.9	1.0	1.1	1.4	1.1	1.3	1.5	1.5
Language Arts	27.4	11.9	6.8	.3	.9	2.7	.0	1.9	.0	12.1
Library Science	.3	7.6	.2	1.2	1.2	.3	1.5	1.0	9.5	1.8
Reading	1.5	.5	.5	1.8	.2	.0	.1	.6	.0	.9
Reading Developmental	2.4	2.6	2.4	1.2	1.9	.1	1.6	1.1	2.8	2.0
Beginning Speech	3.7	6.5	4.7	3.0	4.4	6.5	7.6	6.6	4.4	4.7
Debate	.9	.9	.9	.6	.9	.4	.2	.9	.0	.8
Journalism - Beginning	2.3	1.4	1.8	2.0	3.9	4.2	5.5	6.6	5.8	2.5
Publications	1.6	2.2	1.6	2.0	2.0	1.3	1.6	3.6	6.5	1.8
Total percent for curriculum area	92.9	99.8	89.8	97.2	99.0	111.0	106.1	109.8	119.1	96.4
Average percent of 11 subjects	8.4	9.1	8.2	8.8	9.0	10.1	9.6	10.0	10.8	8.8

Table 12

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–SOCIAL STUDIES

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
State of Washington or Northwest History	.9	2.9	1.3	4.3	3.1	6.8	4.7	7.0	7.0	2.6
United States History	33.4	30.7	33.4	34.0	32.8	34.4	33.2	35.6	27.5	33.1
World History	21.1	23.1	14.8	14.4	15.9	16.1	12.7	14.6	17.5	18.1
Economics	2.6	1.6	1.8	2.0	1.6	3.8	3.2	5.2	3.0	2.3
World Geography	.1	.3	.7	1.2	2.4	2.5	2.7	6.3	2.3	1.0
Sociology	1.8	3.2	3.3	4.4	4.0	6.6	8.1	8.0	4.3	3.6
Psychology	2.5	6.2	4.8	6.0	7.9	7.2	10.6	9.8	4.1	5.2
Contemporary Problems	18.1	8.4	10.1	17.3	22.6	22.1	22.7	23.1	27.1	15.9
Total percent for curriculum area	80.5	76.4	70.2	83.6	90.3	99.5	97.9	109.6	92.8	81.8
Average percent of 8 subjects	10.1	9.6	8.8	10.5	11.3	12.4	12.2	13.7	11.6	10.2

Table 13

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–MATHEMATICS

Subject Title	Size Group									State
	1	2	3	4	5	6	7	8	9	Average
General Math	2.8	1.6	2.7	2.2	1.3	4.1	2.4	2.5	2.7	2.5
Refresher Arithmetic	.5	.6	1.2	1.4	.8	1.3	1.1	.1	.0	.9
Algebra	8.3	10.2	8.4	9.2	6.7	6.3	6.3	4.6	3.7	8.3
Algebra 3, 3rd Semester	3.5	5.7	6.9	5.7	5.0	4.5	5.3	9.1	7.2	5.2
Algebra 4, 4th Semester	1.0	1.4	1.4	2.6	3.5	2.6	2.4	3.1	1.7	1.8
Integrated Algebra and Trigonometry	2.7	2.7	3.2	3.0	3.3	1.8	2.2	2.2	.8	2.8
Plane Geometry	10.7	13.6	13.1	13.2	11.0	15.5	13.2	15.4	11.6	12.5
Trigonometry	.7	2.0	1.8	1.0	1.0	1.4	1.2	1.9	1.0	1.2
Integrated Plane and Solid Geometry	4.5	5.0	5.7	3.2	5.1	.4	2.6	1.6	1.0	4.3
Advanced or Higher Mathematics	2.0	2.4	2.0	2.1	2.4	1.8	3.1	1.7	4.8	2.1
Calculus	.6	.2	.4	.2	.03	.0	.1	.0	.1	.3
Total percent for curriculum area	37.3	45.4	46.8	43.8	40.1	39.7	39.9	42.2	34.6	41.9
Average percent of 11 subjects	3.4	4.1	4.3	4.0	3.6	3.6	3.6	3.8	3.1	3.8

Table 14

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–SCIENCE

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Biological Sciences Curriculum Study, Green Version	8.1	8.0	5.1	5.0	5.0	5.9	3.3	5.9	3.0	6.4
Biological Sciences Curriculum Study Yellow Version	6.9	4.3	9.8	8.4	3.8	6.3	4.5	1.6	.0	6.7
Biology, Introductory	6.4	9.8	9.6	15.3	18.8	13.0	19.4	24.2	22.2	11.2
Biology, Advanced, Second Year	.4	.8	1.1	.7	1.2	2.0	2.4	1.7	.0	.9
Chemistry - Chemical Education Material Study	4.7	5.2	5.0	3.5	3.3	2.5	2.0	2.5	.0	4.2
Chemistry, Introductory	2.2	2.7	5.0	5.5	8.5	8.4	8.2	10.3	14.4	4.6
Physics - Physical Science Study Committee	2.2	2.7	2.2	1.8	2.2	.9	.6	.4	.0	2.0
Physics, Introductory	1.0	1.3	1.8	1.5	1.9	2.7	3.7	6.6	5.8	1.7
Physical Science	1.2	1.1	1.8	2.5	1.4	.5	1.3	1.3	2.1	1.5
Total percent for curriculum area	33.1	35.9	41.4	44.2	46.1	42.2	45.4	54.5	47.5	39.2
Average percent of 9 subjects	3.7	4.0	4.6	4.9	5.1	4.7	5.0	6.1	5.3	4.4

Table 15

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–FOREIGN LANGUAGE

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
French (First Year)	.6	.5	.9	.5	.5	.3	.1	.4	.3	.6
French (Second Year)	.6	.5	.7	.5	.6	.5	.4	.7	.3	.6
German (First Year)	2.9	3.6	4.0	4.1	3.9	3.3	5.4	6.6	6.4	3.7
German (Second Year)	3.4	3.8	3.7	3.4	3.8	3.5	3.6	3.0	2.3	3.6
German (Third Year)	2.0	2.0	1.9	.9	.8	.5	.4	.4	.0	1.5
German (Fourth Year)	.8	.9	.9	.3	.1	.04	.0	.0	.0	.6
Latin (First Year)	3.6	5.2	5.2	4.7	3.7	3.5	2.6	4.8	3.5	4.3
Latin (Second Year)	2.7	3.4	4.1	4.6	3.8	3.3	.9	2.1	2.3	3.3
Latin (Third Year)	1.3	2.0	1.3	1.0	.7	.3	.4	.1	.0	1.2
Latin (Fourth Year)	.5	.1	.2	.1	.2	.1	.0	.0	.0	.2
Spanish (First Year)	.8	.3	.2	.3	.1	.0	.0	.0	.0	.4
Spanish (Second Year)	.3	.6	.1	.2	.3	.04	.0	.0	.9	.3
Total percent for curriculum area	19.5	22.9	23.2	20.6	18.5	15.3	13.8	18.1	16.0	20.3
Average percent of 12 subjects	1.6	1.9	1.9	1.7	1.5	1.3	1.2	1.5	1.3	1.7

Table 16

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–PHYSICAL AND HEALTH EDUCATION

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
Physical Education, Boys	25.7	25.3	21.7	26.7	23.1	19.7	22.4	26.5	35.0	24.4
Physical Education, Girls	26.5	22.8	21.2	20.4	18.5	18.2	17.9	19.2	22.0	22.5
Health Education, Boys and Girls	5.1	10.1	2.5	.9	.8	.0	2.0	3.2	.2	4.0
Health Education, Boys	2.3	.1	3.4	.5	3.8	4.4	4.2	3.4	7.6	2.3
Health Education, Girls	2.9	.0	3.1	2.2	4.7	4.7	3.4	4.0	6.5	2.7
Total percent for curriculum area	62.5	58.3	51.9	50.7	50.9	47.0	49.9	56.3	71.3	55.9
Average percent of 5 subjects	12.5	11.7	10.4	10.1	10.2	9.4	10.0	11.3	14.3	11.2

Table 17

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–MUSIC

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Band	4.2	6.3	7.4	7.5	10.9	14.0	13.4	18.5	12.2	7.4
Orchestra	1.1	1.4	1.4	.7	.0	.2	.0	.2	.0	.9
Girls Chorus	1.4	2.1	2.5	2.1	1.6	.8	1.0	1.4	6.0	1.8
Mixed Chorus or Choir	6.4	7.6	7.8	10.2	12.2	16.5	18.6	24.5	18.1	9.5
Ensembles	1.0	.8	.8	1.1	.9	.2	.1	.2	1.6	.8
Music Survey or Appreciation	.6	.5	.4	.0	.3	1.6	.4	.6	.0	.5
Music Theory or Harmony	.2	.4	.3	.3	.1	.1	.1	.0	.0	.3
Total percent for curriculum area	14.9	19.1	20.6	21.9	26.0	33.4	33.6	45.4	37.9	21.2
Average percent of 7 subjects	2.1	2.7	2.9	3.1	3.7	4.8	4.8	6.5	5.4	3.0

Table 18

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–ARTS AND CRAFTS

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Art General, Introductory	5.4	6.2	5.5	5.6	7.9	9.4	9.5	10.6	13.8	6.3
Art General, Advanced	2.8	4.0	3.7	3.9	3.5	6.3	3.9	3.7	2.0	3.6
Commercial Arts	1.8	1.3	.8	.5	.4	.0	.0	.0	.0	1.0
Art - Crafts, Introductory	2.7	3.8	3.4	4.3	5.0	2.9	4.1	3.7	1.3	3.5
General - Limited 3 Areas or Less	.03	.1	.2	.2	.3	2.0	2.2	3.8	4.8	.5
General - 4 Areas or More	.1	.6	.7	.4	.6	1.2	2.4	3.1	2.7	.6
General Woodworking	3.2	2.1	2.7	4.4	4.1	3.6	3.2	3.5	2.4	3.2
Advanced Woodworking	1.6	1.5	2.1	2.8	4.4	5.7	4.9	2.0	5.1	2.4
General Metalworking	2.8	1.8	2.4	2.5	2.2	1.3	1.1	2.3	.0	2.3
Advanced Metalworking	.6	.5	.8	1.2	.8	.6	.4	.0	.0	.7
Electricity	1.0	1.5	.9	.5	1.5	.01	.3	.1	.8	.9
Electronics	1.0	1.3	.5	1.1	.7	.5	.3	.4	.0	.9
Total percent for curriculum area	23.0	24.7	23.7	27.4	31.4	33.5	32.3	33.2	32.9	25.9
Average percent of 12 subjects	1.9	2.1	2.0	2.3	2.6	2.8	2.7	2.8	2.7	2.2

Table 19

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–HOME ECONOMICS

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
Home Living, Girls	.7	1.0	1.3	2.4	1.9	.0	2.9	2.3	4.2	1.3
First-Year General Home Economics	3.2	4.1	1.9	2.1	.7	1.0	1.6	1.3	2.7	2.5
Second-Year General Home Economics	1.9	1.6	4.2	4.8	8.4	9.7	8.7	9.2	8.6	4.1
Third-Year General Home Economics	.3	.9	1.8	1.9	3.2	4.8	6.1	5.2	4.6	1.8
Nutrition and Food	3.7	2.7	.7	1.5	.5	.7	.3	1.2	.0	2.0
Textile and Clothing	4.5	3.4	1.1	1.7	.9	1.2	.5	2.1	.6	2.6
Personal and Family Relationships	2.4	1.8	2.5	2.0	1.4	1.4	.8	1.6	2.9	2.0
Total percent for curriculum area	16.7	15.5	13.5	16.4	17.0	18.8	20.9	22.9	23.6	16.3
Average percent of 7 subjects	2.4	2.2	1.9	2.3	2.4	2.7	3.0	3.3	3.4	2.3

Table 20
PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS
SENIOR HIGH–BUSINESS

Subject Title	Size Group 1	2	3	4	5	6	7	8	9	State Average
Business English	.9	.7	1.3	1.0	1.1	.7	1.2	1.1	.7	1.0
Business Law	2.1	1.6	1.3	1.6	1.8	2.8	1.9	3.7	1.6	1.9
Typewriting, First Year	17.9	16.8	19.0	22.1	24.7	25.4	25.3	22.3	22.1	19.9
Typewriting, Second Year	4.1	2.9	4.2	4.8	4.5	4.9	5.7	11.3	13.1	4.4
Bookkeeping and Accounting First Year	5.0	4.4	5.7	6.8	9.9	9.2	10.7	12.3	14.6	6.4
Bookkeeping and Accounting Second Year	.6	.2	.2	.3	.4	.2	.1	.7	.1	.4
Business Mathematics	1.2	1.1	.5	1.1	1.2	1.8	1.4	1.6	.7	1.1
Recordkeeping	.2	1.0	1.3	1.0	.0	.6	.2	.0	.0	.7
Shorthand, First Year	3.3	3.9	5.0	5.0	5.6	5.0	5.7	5.9	5.4	4.4
Shorthand, Second Year	.5	.5	.9	.6	.5	.8	1.1	.9	.0	.6
Office Machines	2.4	2.0	1.6	2.2	2.9	1.1	2.2	2.5	.7	2.1
Secretarial Office Procedures	1.2	.4	1.0	.6	.9	1.7	.5	.9	1.5	.9
Clinical Office Procedures	1.0	.8	1.2	1.3	.4	1.2	1.2	1.3	1.5	1.0
Total percent for curriculum area	40.4	36.3	43.2	48.4	53.9	55.4	57.2	64.5	62.0	44.8
Average percent of 13 subjects	3.1	9.1	3.3	3.7	4.1	4.3	4.4	5.0	4.8	3.4

Table 21

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–AGRICULTURE

Subject Title	Size Group									State
	1	2	3	4	5	6	7	8	9	Average
Agricultural Science I First Year	.0	.3	.9	.4	.4	1.1	.6	.9	.9	.4
Agricultural Science II Second Year	.0	.1	1.1	2.1	2.3	4.6	4.6	4.7	2.3	1.3
Agricultural Science III Third Year	.0	.1	.8	1.7	2.3	3.6	3.9	5.9	1.9	1.1
Agricultural Science IV Fourth Year	.0	.1	.5	.9	1.3	3.9	2.4	3.3	1.2	.7
Farm Mechanics and/or Farm Shop	.0	.2	.4	1.0	.9	4.2	2.7	4.0	3.1	.8
Total percent for curriculum area	.0	.8	3.7	6.1	7.2	17.4	14.2	18.8	9.4	4.3
Average percent of 5 subjects	.0	.2	.9	1.2	1.4	3.5	2.8	3.8	1.9	.9

Table 22

PERCENTAGE OF STUDENTS ENROLLED IN SELECTED SUBJECTS SENIOR HIGH–UNCLASSIFIED

Subject Title	Size Group									State Average
	1	2	3	4	5	6	7	8	9	
Other	9.7	7.3	1.1	.8	.7	1.4	2.0	.0	2.9	4.8
Study Hall	27.6	46.0	35.2	37.5	38.2	42.2	39.6	40.6	43.1	35.7
Home or Hospital Instruction	.1	.0	.01	.0	.0	1.6	.2	.0	.0	.1
Home Room or Roll Room	40.1	43.3	10.6	3.2	8.1	7.5	.0	1.8	.0	22.9
Total percent for curriculum area	77.5	96.6	46.9	41.5	47.0	52.7	41.8	42.4	46.0	63.5
Average percent of 4 subjects	19.4	24.2	11.7	10.4	11.8	13.2	10.5	10.6	11.5	15.9

Section 6

ANALYSIS OF OVERHEAD COST RATIOS

Introduction

This addendum gives an analysis of three different ratios which provide indices of the indirect costs (overheads) of running a school district. The indices are defines as follows:

1. The ratio of total costs (less pupil transportation and food service costs) to teachers' salary costs,

$$\begin{aligned} r_T &= (\text{Total appropriation expenditure} \\ &\qquad - \text{Food service costs} \\ &\qquad - \text{Pupil transportation costs}) \\ &\quad \div \text{Teachers' salary costs} \\ &= \text{Total}/\text{TSAL} \end{aligned}$$

2. The ratio of total costs (less pupil transportation and food service costs) to certificated staff salary costs,

$$r_C = \text{Total}/\text{CSAL}$$

3. The per-pupil cost of all accounts other than teachers' salaries, pupil transportation, and food services,

$$f = (\text{Total} - \text{TSAL}) \,/\, (\text{Total Base Enrollment}).$$

These ratios are to be used in the alternative funding formulas to determine their effects on the school districts of the state. The alternative formulas will contain the expressions:

$$G_T = r_T\,(\text{TSAL}')(\text{TBE})/(\text{S/T})$$

$$G_C = r_C(\text{CSAL}')\,(\text{TBE}) \,/\, (\text{S/C})$$

$$G_O = \text{TBE}\,(\text{PPTSAL} + f)$$

where

G is the state guarantee,
TSAL′ is the state-wide average teacher's salary.
CSAL′ is the average certificated staff member salary.
TBE is total base enrollment for a particular school district.
S/T is the average pupil to teacher ratio.
S/C is the average pupil to certificated staff ratio.
PPTSAL is the state-wide average per-pupil cost of teachers' salaries.
f is the state-wide average per-pupil cost of overheads, as defined above.

It should be noted that the ratios r_C and r_T are to be used with appropriate staff ratios and average salaries, whereas f is to be used with student enrollment. The ratios r_T and f are related such that when f is divided by the per-pupil cost of teachers' salaries it is equal to r_T-1.

Summary and Conclusions

Statistically, the best factor to use in a funding formula with an overhead weighting factor is the second ratio defined above, the ratio of total costs to certificated salary expenditures. This ratio is the most stable of the three investigated over both the location and size group classifications. However, its statistical advantage over the ratio of total cost to teachers' salary expenditures is slight (less than a 7 percent increase in variability). The variability of the third ratio, the per-pupil cost of overhead, was over three times the variability of the ratio of total cost to certificated salaries. The most useful factor would most likely be the ratio of total cost to teachers' salary since it is a simpler matter to specify a program of instruction in terms of the classroom teachers required than in terms of all the certificated staff required to support a program of instruction and other educational services.

The rural districts were about three times as variable as the districts in the other location groups on all three ratios. The districts of size group 9 (fewer than 200 pupils per district) were about twice as variable as the districts of size group 8 and more than five times as variable as size group 4, which was lowest or next to lowest in variability on all three ratios. Since the small districts can receive equitable apportionment using other weighting factors, it is advisable to weight the overhead cost ratios by the size of the district as measured by the number of students in the district. These weighted average ratios are:

Total Cost to Teachers' Salary, $r_T = 1.81$
Total Cost to Certificated Salary, $r_C = 1.46$
(Total Cost – Teachers' Salary)
Total Base Enrollment , $f = \$300$

The associated standard deviations are: 0.2714 for r_T, 0.2116 for r_C, and $145 for f. Fifty percent of the r_T's fall within 0.19 units of each other, the r_C's had 50 percent within 0.12 units, and the interquartile range for the f ratios was $97.

The main implications of the following analysis are that:

1. The per-pupil cost of all accounts other than teachers' salaries, transportation, and food services (the ratio f) is too variable to consider for use when the other two ratios are so much less variable.

2. The weighted state-wide median total cost to teacher salary and to certificated salary ratios adequately reflect the 1968-69 situation for all districts except the 188 districts classified as rural on either side of the Cascade Mountains and the 10 classified as cities on the west side.

A concrete example of the dollar guarantee to a district with 3,500 total base enrollment may help elucidate these results. Using the state-wide average teachers' salary of $8,454, the average certificated salary of $8,955, the 24.8 pupil to teacher ratio, the 19.5 certificated to student ratio and the $374 per-pupil cost of teachers' salary, the following guarantees would result. In each of the following items (1, 2, and 3), the upper (G+) and lower (G–) bounds provided by adding or subtracting one standard deviation from the median will be calculated. These bounds would account for about two thirds of the hypothetical districts with 3,500 pupils, and give a measure of the expected dollar fluctuations in actual expenditures for districts of 3,500 pupils.

1. Using Total Cost to Teacher Salary Ratio, r_T

$G = r_T$ (State Avg. TSAL) (TBE in SD)/(State Pupil/Teach.)
$= r_T$ ($8454) (3500)/24.8

$G^- = 1.54$ ($1,193,105) = $1,837,382

$G = 1.81$ ($) = $2,159,520

$G^+ = 2.08$ ($) = 2,481,658

The differences between G^+ and G^- is $644,276.

2. Using Total Cost to Certificated Salary Ratio, r_C.

$G' = r_C$ (State Avg. CSAL) (TBE in SD)/(State Pupil/Cert.)
$= r_C$ ($8,995) (3,500)/19.5

$G^- = 1.25$ ($1,607,308) = $2,009,135

$G' = 1.46$ ($) = $2,346,670

$G^+ = 1.67$ ($) =2,684,204

The difference between G^+ and G^- is $675,069.

3. Using (Total Cost–Teachers' Salary)/Total Base Enrollment, f.

$G = (\text{TBE in SD}) (\text{Per Pupil TSAL} + f)$

$= 3{,}500 (\$374 + f)$

$G^- = 3{,}500 (\$374 + \$155) = \$1{,}851{,}500$

$G = 3{,}500 (\$374 + \$300) = \$2{,}359{,}000$

$G^+ = 3{,}500 (\$374 + \$445) = \$2{,}866{,}500$

The difference between G^+ and G^- is \$1,015,000.

The above example is intended to provide an example of what happens when the various overhead factors are used and how well they would do for about two thirds (plus or minus one standard deviation) of the hypothetical cases. Of course the other factors in the above formulas and the factors in the funding model also have associated uncertainties. The result of the funding model simulations are required to obtain a more exact analysis of the effect of the overhead ratios on the guarantee to the individual school districts.

Results

State Averages

Statistically, the index with the least variability was the ratio of total costs to certificated salaries, r_C. The state-wide average r_C was 1.52 with a standard deviation (sd) of 0.2116. The standard deviation as a percentage of the average, *i.e.*, the coefficient of variation (CV), was 13.9 percent. The minimum ratio was 1.17 and the maximum 3.80 for a state-wide range of 1.90. Fifty percent of the r_C's fell within 0.12 units of each other between 1.41 and 1.53, with 44 percent in the interval from 1.4 to 1.5.

The ratio of total costs to teachers' salaries showed slightly increased variability about the average r_T of 1.82 with an sd of 0.2714, a CV of 14.9 percent and an over-all range of 2.61 from 1.17 to 3.78. The modal interval from 1.7 to 1.8 accounted for 30 percent of the school districts. The interquartile range was 0.19 units and about two thirds of the districts had r_T in the range from 1.5 to 1.9.

The ratio of the difference between total costs and teachers' salaries to total base enrollment, f, was more than three times as variable as the other two ratios, as measured by the coefficient of variation. Whereas r_C had a CV of 13.9 percent and r_T of 14.9 percent, f had a CV of 45.6 percent. Such broad variability precludes the use of f in an equitable funding formula. As a point of general interest, the other statistics on the per-pupil cost of overheads are given in Table 1 for comparison with the statistics for the other ratios.

Table 1

STATE–WIDE SUMMARY STATISTICS FOR OVERHEAD RATIOS

Statistic	r_T Total/TSAL	r_C Total/CSAL	f (Total - TSAL)/TBE
Arithmetic Average	1.82	1.52	$ 317
Average Weighted by TBE	1.82	1.47	305
Median	1.79	1.47	284
Median wtd. by TBE	1.81	1.46	300
Standard Deviation	0.27	0.21	145
Coefficient of Variation	14.9	13.9	45.6
Modal Interval	1.7-1.8	1.4-1.5	250-275
Percent of SD's in Interval	30.2	43.7	16.3
Interquartile Range	0.19	0.12	97
IQT Range as Percent	10.6	8.1	34.1

377

Size Group Comparisons

The size group medians of the total cost to teachers' salary ratio, r_T ranged from a low of 1.73 in group 9, to a high of 1.89 in group 2, a 9.2 percent increase. The coefficients of variation ranged from 3.4 percent in group 1 up to 26.1 percent in group 9, a difference of 152 percent relative to the state CV of 14.9 percent. The coefficients of variation were less than 8 percent for groups 1 through 7.

The size group medians of the total cost to certificated salaries, r_C, range from 1.43 in group 4 to 1.55 in group 9, an increase of 8.4 percent. The coefficients of variation ranged from 3.1 percent in group 1 to 21.3 percent in group 9, a difference of 131 percent relative to the state CV of 13.9 percent, and were less than 7 percent for groups 1 through 7.

The per-pupil costs of overhead had an increase from $240 in group 6 to $336 in group 2, or 40 percent. The CV's ranged from 11.9 percent in group 4 to 63.8 percent in group 9, a difference of 114 percent relative to the state CV of 45.6 percent. Group 9 had a CV more than twice as large as the next largest, 29.0 percent in group 6.

The behavior of group 9 with respect to these indices is of interest. These districts, with fewer than 200 pupils, had the lowest total cost to teacher salary ratio, but the highest total cost to certificated salary ratio. The low r_T would not be expected since group 9 has the smallest percentage of staff in teaching positions. Group 9 also has the smallest percentage of certificated staff of all the size groups. The total cost to certificated staff ratio, r_C, would be expected to be the largest. The comparatively low r_T for group 9 is most probably due to the inclusion of part-time principals in the cost of teachers' salaries. Group 9 had over twice the variability of the other size group for all three ratios as measured by the coefficient of variation. These statistics are summarized in Table 2. Tables 3, 4, and 5 give the frequency distribution for r_T, r_C, and f for the composite of size groups 1 through 6, and for groups 7 through 9 broken into high school and nonhigh school districts. The state-wide distribution is also given.

Table 2

OVERHEAD COST RATIOS BY SIZE GROUP

		Medians			
Size Group	No. of SD's	Total / TSAL r_T	Total / CSAL r_C	(Total -TSAL) / TBE f	Percent of Students
1	6	1.84	1.46	332	30.8
2	9	1.89	1.49	336	16.2
3	20	1.77	1.44	275	18.3
4	30	1.74	1.43	252	13.7
5	25	1.80	1.45	282	7.0
6	28	1.75	1.46	240	4.6
7	60	1.80	1.46	276	5.7
8	65	1.82	1.50	305	2.8
9	82	1.73	1.55	327	0.9
State Average	325	1.79	1.47	284	100.0
State Weighted by Students		1.81	1.46	300	

Coefficients of Variation

Size Group			
1	3.37%	3.08%	12.05%
2	4.75	3.62	13.79
3	5.06	4.19	13.30
4	4.16	3.12	11.85
5	5.90	3.52	13.38
6	7.91	6.27	29.03
7	6.66	4.80	19.87
8	10.79	9.09	27.08
9	26.08	21.31	63.81
State Average	14.91%	13.92%	45.63%

Table 3

FREQUENCY DISTRIBUTION OF THE RATIO OF TOTAL COST TO TEACHERS' SALARIES r_T

	Number of School Districts				
	HS			Non-HS	State
Interval	1-6	7-9	HS	7-9	Total
Less Than 1.5	0	0	0	18	18
1.5 - 1.59	2	5	7	5	12
1.6 - 1.69	21	19	40	8	48
1.7 - 1.79	48	38	86	11	98
1.8 - 1.89	32	33	65	11	77
1.9 - 1.99	9	20	29	7	36
2.0 - 2.09	3	10	13	1	14
2.1 - 2.19	0	2	2	2	4
2.2 - 2.29	1	2	3	3	6
2.3 - 2.39		2	2	1	3
2.4 - 2.49				1	1
2.5 - 2.59					
2.6 - 2.69				1	1
2.7 - 2.79				1	1
2.8 - 2.89					1
2.9 - 2.99					
More Than 2.99				5	5
Total	116	132	248	75	325

Table 4

FREQUENCY DISTRIBUTION OF THE RATIO OF TOTAL COST TO CERTIFICATED SALARY r_C

	Number of School Districts				
	HS			Non-HS	State
Interval	1-6	7-9	HS	7-9	Total
Less Than 1.3		1	1	2	3
1.3-1.39	28	21	49	8	58
1.4-1.49	64	58	122	19	142
1.5-1.59	22	40	62	10	72
1.6-1.69	1	8	9	9	18
1.7-1.79		1	1	6	7
1.8-1.89	1	1	2	10	12
1.9-1.99				2	2
2.0-2.09		1	1	1	2
2.1-2.19				1	1
2.2-2.29				2	2
2.3-2.39		1	1	2	3
2.4-2.49					
2.5-2.59					
2.6-2.69					
2.7-2.79				1	1
More than 2.79				2	2
Total	116	132	248	75	325

Table 5

FREQUENCY DISTRIBUTION OF PER-PUPIL COST OF (TOTAL - TEACHER SALARY), f

	Number of School Districts				
	HS			Non-HS	State
Interval	1-6	7-9	HS	7-9	Total
Less Than $200	1		1	19	20
$ 200-224	10	2	12	8	21
225-249	28	15	43	10	53
250-274	26	22	48	6	54
275-299	21	23	44	4	48
300-324	12	12	24	1	26
325-349	9	14	23	4	27
350-374	5	14	19	0	19
375-399	2	8	10	1	11
400-424	1	8	9	3	12
425-449		2	2	1	3
450-474		4	4	1	5
475-499		1	1	2	3
500-524		1	1	1	2
525-549		2	2	2	4
550-574		2	2	1	3
575-599		1	1	1	2
More Than $559	1	1	2	10	12
Total	116	132	248	75	325

Location Group Comparisons

The school districts of the state were divided into 10 groups based on the location of the school district office. "Location" was defined by two characteristics:

1. In a county east or west of the Cascade Mountains,
2. Urban, suburban, city, town or rural place type.

The five place types were defined as follows:

Urban – More than 40,000 population
Suburban – More than 15,000 population and near an urban area
City – 10,000-40,000 population
Town – 1,000-10,000 population
Rural – Less than 1,000 population.

There were 20 counties east, and 19 west of the mountains. The number of school districts in each of the 10 groups defined by these 2 characteristics is given in Table 6.

The median total cost to teacher salary ratios for the location groups in Table 7 are all within 0.02 of each other for the districts east of the mountains, but on the west side the place-type medians fluctuate over a range of 0.14 units, from a high of 1.88 for suburban districts to a low of 1.73 for the city districts. The coefficients of variation for r_T, displayed in Table 10, indicate a greater variability for districts west of the mountains, particularly those in the rural classification.

The median total cost to certificated salary ratios, r_C, in Table 8 show smaller over-all differences than was the case for r_T. The town and rural classifications have the same median ratios on either side of the state, the rural being 0.05 units higher than the town medians. The spread on the east side is only 0.01 units from the urban group through the town group, but it is 0.09 units on the west side. The consistent drop of both r_T and r_C for the city type west of the mountains could be partially explained by an effort to keep salary schedules comparable with those in the nearby urban and suburban districts, leaving less money for noncertificated staff expenses. The coefficients of variation for r_C in Table 11 show smaller variability for all location groups except the rural districts west of the mountains which have a CV for r_C approximately equal to that for r_T.

The median per-pupil costs of overhead given for the location groups in Table 9 follow the same pattern as for the other ratios, having a broader range ($96) on the west side than on the east side ($43). The medians for the urban and suburban districts are the largest in Table 9, as was the case for r_T in Table 7 and almost (within 0.01 units) the case for r_C in Table 8. The coefficients of variation for the ratio f in Table 12 show that the districts east of the mountains were more variable on this index than those in the west, which is the reverse of the situation for r_T and r_C. In addition this index begins to show relatively increased variability in the town districts on the west side.

Table 6

NUMBER OF SCHOOL DISTRICTS IN LOCATION GROUPS

	Place Type					
E-W	U	S	C	T	R	E-W
East	2	0	8	45	104	166
West	4	15	10	53	84	159
Place Type	6	15	18	98	188	325

Table 7

MEDIAN TOTAL COST TO TEACHER SALARY RATIO, r_T BY LOCATION GROUPS

	Place Type					
E-W	U	S	C	T	R	E-W
East	1.80	----	1.78	1.79	1.78	1.79
West	1.87	1.88	1.73	1.75	1.81	1.79
Place Type	1.84	1.88	1.76	1.77	1.79	1.79

Table 8

MEDIAN TOTAL COST TO CERTIFICATED SALARY RATIO, r_C BY LOCATION GROUPS

	Place Type					
E-W	U	S	C	T	R	E-W
East	1.44	——	1.44	1.45	1.50	1.47
West	1.49	1.49	1.40	1.45	1.50	1.46
Place Type	1.45	1.49	1.43	1.45	1.50	1.47

Table 9

MEDIAN PER-PUPIL COST OF OVERHEAD, f BY LOCATION GROUPS

	Place Type					
E-W	U	S	C	T	R	E-W
East	298	---	298	281	324	298
West	352	331	267	256	280	271
Place Type	322	331	280	261	299	284

Table 10

COEFFICIENTS OF VARIATION FOR r_T

	Place Type					
E-W	U	S	C	T	R	E-W
East	(2.17*)	----	5.69	6.81	16.46	13.77
West	6.32	4.25	3.91	7.23	20.52	15.84
Place Type	5.21	4.25	5.03	6.56	18.52	14.91

Table 11

COEFFICIENTS OF VARIATION FOR r_C

	Place Type					
E-W	U	S	C	T	R	E-W
East	(0.51*)	----	3.65	4.48	12.32	10.86
West	4.35	3.36	3.30	5.87	20.51	16.27
Place Type	3.72	3.36	3.83	5.25	16.69	13.92

Table 12

COEFFICIENTS OF VARIATION FOR f

	Place Type					
E-W	U	S	C	T	R	E-W
East	(4.19*)	-----	11.22	14.18	57.19	51.87
West	12.13	16.50	13.68	23.27	41.90	35.31
Place Type	12.72	16.50	13.23	19.51	52.47	45.63

---

* The fact that there are only 2 districts in this group makes this statistic unreliable.

SCHOOL LEVY SURVEY

1970 SCHOOL LEVY SURVEY

Introduction

This report is divided into three sections. Section One presents a summary picture of supporters and opponents of the school levy, their evaluations of the schools in their district, and their reasons for voting for or against the levy. Comments drawn directly from the questionnaires are used to illustrate points made in the study. The second section of the report presents the results of the survey in more statistical form and with somewhat greater precision. Section Three is an appendix in which we explain our methodology: the way in which we drew the sample, response rates to the mail and telephone survey, and the representativeness of the sample.

Section I

Who Voted Yes and Who Voted No

The data provide few surprises, except that they are consistent. Support for school levies comes largely either from those who can afford to pay the increased costs of education – professional and managerial people, people with comparatively high incomes, and people with at least some college education – or from those who have a direct stake in the outcome of the levy because they have school-age children. One parent, with two children in school, said, "I believe education is important and would be a bargain at twice the cost we are now paying." Opposition comes from those who are over age 50, have low or fixed incomes, or have comparatively little education. A disabled veteran wrote, "I voted No in the last special (levy) because my property tax is about to make me move. 1959 they were $59.00. Now over $600.00. I'm on a set income and cannot stand any more taxes. If they go up I'll lose my home." A farmer pointed out, "People are rebelling against taxes and high cost of everything – although Farmer's incomes are *zero*."

Perceptions of the School System

By and large, voters rate the school systems favorably, although they think that teachers are doing a better job than school administrators and school boards. More importantly, a person's rating of his school is correlated to his vote on the levy; the more favorably he views the school, the more likely he is to support the levy. A housewife who voted "no" said, "I felt the school was badly managed financially and some of the programs offered were untried and the resulting chaos reverberating from top to bottom called for a change." Another "no" voter, responding to a question as to how the school situation could be changed, suggested, "A school board that listens to parents' questions and answers honestly."

The emphasis on honesty in dealings with the public and access for information runs throughout the interviews and is reflected in our finding that the people who voted for the levies felt it was easier to get information from the district than those who opposed the levies. A housewife succinctly stated the plight of many people who opposed the levy; when asked what things influenced her decision to vote the way she did, she replied, "Sparce amount of information given to the voters. Also honesty in presenting the information asked." Access to information and honesty refers not only to levies, but also to the day-to-day encounters which parents have with the schools. One levy supporter said, "The only contact I've had with the school has been with Dr. ________ and he's been willing to talk to us at any time." Another parent, who opposed the levy, had a less happy experience:

> I accidentally found out that my son was skipping school very often, and bringing kids to my home and having a ball. I was angry and called the school to see why I was not notified of the skipping. They said if a child missed once a week they couldn't do much. Other schools either call you or have you called any time a child misses one day.
>
> I called a number of times and was very disappointed. I spoke to the Superintendent once and he couldn't wait to turn me back over to the boy's counselor or whoever was in charge of absenteeism. In other words, I got nowhere.

A number of voters also complained about tactics used by the schools during the levy campaign. Threats of loss of accreditation, decrease in the number of teachers and books, closure of schools, etc.

convinced some voters to support the levy, but may have alienated others. A housewife explained her feelings thusly:

> When the levy failed the first time, instead of finding something that would be acceptable to the voters – the school officials lined themselves up on one side of the issue and the voters on the other. We were threatened and forced. Our children were told what they would have to do without if their parents didn't vote for the levy. (No playground equipment, no books, and of course my children believed this literally.) The young people were made part of the issue. If we were against the levy we were automatically against 'the kids.'
>
> This dictatorial (do-it-or-else) attitude on the part of school officials is, I think, one of the reasons, besides an increase in taxes, that the levy failed.

School boards and administrations were also criticized for past decisions such as selling the rights to forest lands and placing school buildings on unsuitable or inconvenient sites. Moreover, one opponent noted, "One must provide funds to educate the children, but we did *not* need a new stadium and tartan turf!" Some districts were also accused of trying to do too much; either their budgets were too large compared with similar sized districts, or their desire to attain excellence incurred expenses beyond what the voter would pay for.

Was There a Taxpayer's Revolt?

Although the question cannot be answered precisely at this time, it is clear, from the data and comments made by respondents, that tax considerations were important. Low-income families had the lowest levels of support for the levy. In addition, support for the levy dropped the higher the voter's property tax assessment and the larger the bite that the tax dollar took from his family income. In a declining economy, where tax dollars are becoming scarcer but the demand for services has not diminished, something must give. A teacher noted, "People are not mad at schools. They are getting to the breaking point tax-wise. This is an area where they can say 'no' to the government." In addition to the level of taxes, voters also object to what they perceive as the unfairness of the property tax as a base for education. Many feel that yearly levies are unnecessary (although several mentioned the control which this gave voters over the district) and that everyone should pay taxes for schools, however they are assessed. The most frequently mentioned tax alternatives were the property tax, the income tax, less tax spent on the elderly, and a proposed equalizing tax on renters or the parents of school-age children. Typical of those who felt taxes were too high was an oyster farmer, who said, "Until I see the tax load more fairly proportioned I refuse to vote 'yes' on any special levy."

Taxes, however, were only one of a complex of reasons offered for voting against the levy. Often there was criticism of how the school district was handling the money which was raised by the levy. An angry bus driver noted, "Our district is in a sorry financial state. I know levies went down because of a stubborn uneducated school board with million-dollar ideas on a beggar's budget. This is collosial (sic) mismanagement. The money is also being used $150,000 on a new track and only $1,800 on textbooks. No wonder people are fiery mad! Small wonder the levy failed!" Many voters feel not only that the schools mismanage their funds, but also that they are not turning out an adequate product. According to one voter, "The product of a school should be maturing responsible students. Their product is very poor lately and people do not want to pay taxes to turn out such students."

What Is to Be Done?

If services and personnel are to be cut by the district, the voters have ideas on what the priorities should be: what they perceive to be excess and unnecessary personnel (counselors and administrators) and extracurricular activities. Many voters do not believe that extracurricular activities should be eliminated, but that parents should be asked to pay for them, providing uniforms or driving the students to football and basketball games.

What do voters suggest should be done in the districts? A great many voters feel that the schools will be able to survive on the moneys available through better and more efficient money management. Economies can be made by cutting down on nonessential personnel and extracurricular activities, reducing the frills in the curriculum, and cutting the frills in the physical plant – wall-to-wall carpets, colored television, new tracks and football stadiums. To aid future levies the voters suggest that communication between themselves and the administration (and school board) be easier, more honest, and understandable. Suggestions include breaking down budgets and levy proposals into component parts and explaining the necessity for everything. If possible, the levy should also be divided into parts so the electorate can choose which parts of a package it wishes. As one taxpayer pleaded:

> I do not feel we were given a good choice. I honestly feel that when a school district submits a levy, the taxpayers should be given three or four choices as far as budget amounts. The average person is realistic enough to realize that schools need financing and will cast a fair vote. However, no one likes getting 'suckered into' paying for a lot of unnecessary extras. I was told by one of the administration staff that xxxxx school officials want the best school in the state; the best teachers, the highest curriculum; the most outside activities for our students. As a parent, I would go along with this, but I am also a taxpayer and feel I must make my choice somewhere in-between these two roles.

To aid in communication between the district and the voters several suggested that the levy be explained in dollar terms rather than in mills; as one voter noted, "We feel safer this way."

Summary

Taxes were a primary factor in the defeat of school levies during the past year. A concerned teacher wrote:

> People are getting very tired of additional taxes and this is the *only* way that they can fight back. It's not that they are against our school. They are against additional taxes. Here they had a choice and could vote "*no*"–and they did.
>
> THIS MUST CHANGE.

But not all voters were opposing the levy solely because of taxes. A sizeable proportion of the electorate feel alienated from the school system, unable to get information easily from it, or to influence its decisions. Under these circumstances the levy offers an opportunity not only to vote on school expenditures but also to exercise control (in an indirect way) over the activities of teachers, administrators and school boards.

Section Two

The School Levy: Supporters and Opponents

There are remarkably distinct (and statistically significant) differences between supporters and opponents of the school levy in the 18 districts studied.

1. Women are more likely than men to support the levy (60.3 percent to 51.7 percent). The support of women, combined with the fact they are more likely to vote in levy elections, insures that the levies have a fighting chance of passage.

2. People in the 21-50 age category support school levies at a rate greater than the required 60 percent, with people in their 30's giving levies the greatest support. People over 50 are opposed to the levy (only 45.1 percent supported the levy). Considering the fact that those over 50 constitute a sizeable proportion of the levy electorate (47 percent of our sample), it is no wonder the levies lost.

3. Professional people (81.7 percent), clerical and sales (60.9 percent), self-employed businessmen (58.7 percent), unskilled workers (58.1 percent), semiskilled and skilled workers (54.7 percent) supported the levy, while farmers (41.5 percent) and retired people (35.5 percent) opposed it.

4. Renters (78.3 percent) were more likely to support the levy than home owners (55.4 percent). However, over 90 percent of our sample were home owners.

5. Income is an important determinant of support or opposition; those earning under $5,000 a year – retired people and farmers – have the lowest levels of support (38.2 percent) while those earning over $5,000 support the levy (59.8 percent - 66.7 percent). In fact, the more money a family earns, the more likely it is to support the levy.

6. The more education the voter has, the more likely he is to support the levy, regardless of sex. Lowest levels of support (around 40 percent) come from those voters with a grammar school or junior high education, while the highest levels of support (80 percent) came from those who have at least completed college. Those who have completed high school or have some college support levies, but not at the required 60 percent level.

7. People with children support the levy, particularly if they have more than two children. More important, people who have children in the school system support the levy by approximately 2-1 while less than half the people (46.6 percent) who have no children in the school system support the levy.

8. Community involvement is also related to support for the school levy. Fifty-three percent of those who belonged to no community organizations supported the levy, compared with 60 percent - 70 percent support from those who belonged to one or more organizations.

Perceptions of the School System

Supporters and opponents of school levies are significantly different not only in backgrounds but also in the way they perceive the school system. We have stated the data as though the perceptions of the school tended to be at least partially causitive of the voting patterns. This seemed to us to be the logical sequence. However, it should be borne in mind that the way a person voted on the levy could influence and cause rationalizations on the voter's part. It should be remembered therefore that the following conclusions although stated in causitive fashion are, in reality, correlative. We found:

1. Almost 70 percent of those who rated teachers in the district as "good" supported the levy, while 29 percent of those who rated the teachers as "bad" supported the levy. Support for the levy is correlated to evaluations of teachers; the more positively they are evaluated, the more support for the levy. Fortunately, almost half the respondents rated teachers as "good."

2. Administrators receive a substantially more mixed review from the electorate; only 37.4 percent of the electorate perceive them as "good." However, as with the teachers, support for the levy is related to evaluation of administrators: 80.3 percent of those who rated administrators as "good" supported the levy, compared with 26.1 percent of those who rated them as "bad."

3. What is true for teachers and administrators is also true for school boards: 76.9 percent of those who rated the school board as "good" supported the levy, compared with 32.5 percent who rated them as "bad."

4. Consequently, it is not surprising that a composite measure of evaluation of the school district, comprised of evaluations of teachers, administrators, and school boards, shows a high correlation between positive evaluation of the district and a high level of support for the levy and a negative evaluation and opposition to the levy.

5. Support or opposition to the levy is also correlated to whether the voter perceived teachers and administrators as being paid too much, enough, or too little. Eighty percent of those who thought teachers were paid too much voted "no" while 84.7 percent of those who thought they were paid too little voted "yes." The bulk of the sample (64.5 percent) who thought teachers were paid about enough favored the levy (57.8 percent).

6. Over one third of the sample felt that administrators were paid too much, and of those who felt that way, 59.3 percent voted "no" on the levy. Those who felt administrators were paid about the right amount or too little supported the levy (73.5 percent and 90.2 percent, respectively).

7. The more easily voters perceive it is to obtain information about the school, the more likely they are to support the levy. Of those who felt they could get information "very easily" 71.8 percent supported the levy, while only 33.3 percent of those who felt they could get information "with great difficulty " supported the levy. Equally important for the school, 30.7 percent of the electorate find it difficult to obtain information about the schools.

Property Taxes, Previous Levies, and Support or Opposition

Much rhetoric has been used arguing whether taxpayers are revolting against increased property taxes by voting against school levies, which directly effect their taxes. We find:

1. Support for the school levy drops the higher one's property tax assessment. Seventy-five percent of those who pay less than $100 per year support the school levy. Of those paying over $600 per year, less than half support the levy.

2. Although the gross amount of the property tax is important, the property tax as a percentage of total family income is an equally valid measure. The greater the proportion of his total income goes for property taxes, the more likely a person will oppose the school levy. Seventy-one percent of those paying one percent of their income in property taxes supported the levy, compared with 66.0 percent of those paying over 7 percent of their income in taxes who opposed the levy. Those paying one or two percent supported the levy by at least 60 percent, those paying 3 percent or 4 percent supported it by 50 percent - 60 percent, and less than 50 percent of those paying more than 4 percent supported the levy.

3. It makes little difference in support or opposition if a voter's property had been reassessed in the last year.

4. It does make a difference if school taxes have been raised in the past year. Those who have had their school taxes increased split about evenly in support of the levy, while 65 percent of those whose taxes had not increased support the levy.

5. The best indicator of how a person will vote in a levy election is his vote in preceding levy elections. Ninety-six percent of those who voted "no" in the last previous levy election voted "no" in this one, while 77 percent of those who voted "yes" in the last previous election voted "yes" in this one. The nay-sayers are consistent as well. Eighty-five percent of those who had never supported a levy in the past also voted "no" on this one. The slippage occurs when we note that only 60 percent of those who had voted "yes" in previous elections voted "yes" in this election.

Reasons for Support and Opposition To the Levy

Voters who supported or opposed the levy in their district did so for clear-cut reasons. When asked "what things influenced your decision to vote the way you did in the recent school levy election?" the following reasons were given: (number of respondents in parentheses)

Supporters. There were four basic reasons for support (in descending order of importance).

1. Voter has always supported education, it's a matter of principle. (122)
2. Referred to specific needs of the district – teacher's salaries, new buildings, books, etc. (112)
3. A member of the family is attending school. (101)
4. Children (in general) need a good education – an explanation often offered by people with no children or whose children are no longer in school. (81)

Opposition. Opposition to the levy was based on a complex of reasons which can be categorized as follows (in descending order of importance).

1. The most popular reason was that "taxes are too high." (110)
2. Schools are wasting money, spending too much, exercising poor money management. (69)
3. Criticism of the school administration – policies, inability to communicate, lying; and the curriculum – too many frills. (67)

4. Criticism of the levy system or this specific levy. (31)
5. Criticism of physical plant – improper use, no standardized floor plans, high architect fees, and, in some districts, location of specific schools. (25)

What Can the District Do?

Those who voted against the levy were asked how the school situation could be changed so that they would vote for the levy. They made the following suggestions: (number of respondents in parentheses)

1. Institution of some form of money management – cut budgets, reduce expenditures, cut salaries, do with what they have, etc. (122)
2. Criticism of the school administration – reduce personnel, reevaluate them, get administrators to communicate, explain more clearly where the money goes. (70)
3. Physical plant – reduction of building costs, one floor plan, better planning of facilities, buildings are too lavish, too many television sets. (42)
4. Curriculum and extracurricular activities – cut out frills, return to basics, eliminate sex education, deemphasize physical education, eliminate extracurricular activities. (41)
5. Will never vote for the levy. (15)
6. Change the tax system. (26)

In response to a question regarding what activities and programs should be cut back now that the levy has failed, the voters gave the following priorities:

1. Personnel: counselors and administrators primarily, but teachers, teacher's aids, uncertified staff as well.(417) This is first priority for those voting "no" and second priority for those voting "yes."
2. Extracurricular activities: athletics and others, such as debate, music, drama, etc. (361) This is first priority for those voting "yes" and second priority for those voting"no".
3. Curriculum: kindergarten, vocational-technical training and special education for the handicapped. (127)
4. Supplies and equipment: textbooks, audio-visual equipment, teaching machines, library books. (107)
5. Transportation: particularly to and from extracurricular athletics and activities. (98)
6. Physical plant: maintenance and construction. (95)
7. Overloading classes, double-shifting, etc. (26)
8. A sizeable number of voters, particularly those who had supported the levy, said "nothing" should be cut back. (70)

How Should People Pay for Schools?

When asked the voters ranked the following alternatives for school revenues:

1. Property taxes: favored more by those who voted "yes" than those who opposed the levy, but still ranked as the best alternative by both groups. (282)
2. Income taxes: favored more by those who voted "yes;" ranked second by those voting "yes" and third by those voting "no." (239)
3. No (or reduced) tax for the elderly: ranked third by those voting "yes" and second by those voting "no." (198)
4. Other alternatives: the most popular one by far was the suggestion that everyone pay for schools, particularly renters. Other suggestions included more timber rights, legalizing gambling, a state lottery, taxes on cigarettes and liquor, etc. (147)
5. Only people with children should pay. (75)
6. State: either the state should increase its contribution to local districts or the state should take over the cost of education. (49)
7. Sales tax: earmarking part of the sales tax for education. (38)
8. No charge for people with children in private schools. (28)
9. Federal support: increased Federal role. (20)

APPENDIX

This study is based on data collected from 397 mail questionnaires and 318 telephone interviews. A random sample was drawn of those who had voted in the most recent school levy election in the 18 school districts where the levy had failed. Mail questionnaires were sent to 50 voters in each district; 397 of 900 questionnaires were returned (44.1%), a reasonable response rate for a mail questionnaire to the general population. Comparison of respondents to the mail questionnaire and the telephone survey indicate no significant differences between the two groups although those returning mail questionnaires were more likely to have supported the levy. An additional 25 voters in each district were telephoned and an average of 22 were contacted. Of the 395 voters contacted by telephone 318 consented to be interviewed (80.5%). Thus, of the 1,295 voters who received mail questionnaires or were reached by telephone 715 gave usable data (55.0%). This response rate and its uniformity across districts insures that the reliability of the data is within acceptable limits (± 4%) of error.

Table 1

VOTE BY SEX

Sex	Yes	No
Male	43.0%	51.8%
Female	57.0	48.2
Total	395	307

Table 2

VOTE BY MARITAL STATUS

Marital Status	Yes	No
Married	90.8%	89.1%
Single	4.1	3.3
Widowed or Divorced	5.1	7.6
Total	393	302

Table 3

VOTE BY AGE

Age	Yes	No
Under 20	1.0%	.7%
21-30 years	12.4	8.3
31-40 years	24.0	11.6
41-50 years	25.0	20.5
Over 50 years	37.6	58.9
Total	388	302

Table 4

VOTE BY OCCUPATION

Occupation	Yes	No
Professional and semiprofessional	23.2%	6.9%
Self-employed businessmen, managers and officials	9.7	8.9
Clerical and sales: buyers, agents	10.2	8.6
Skilled and semiskilled blue collar	18.3	19.9
Unskilled service workers, farm laborers	13.1	12.4
Farm owners	4.4	8.2
Unemployed	0.0	.3
Retired	12.8	30.6
Others	8.4	4.1
Total	383	291

Table 5

VOTE BY HOME OWNERSHIP

Home ownership	Yes	No
Rent	9.2%	3.4%
Own	90.0	95.9
Other	.8	.7
Total	390	295

Table 6

VOTE BY MONTHLY COST OF HOME

Monthly Cost of Home	Yes	No
Under $50	7.8%	4.1%
$50-$100	39.2	35.6
$101-$150	34.9	38.4
$151-$200	13.9	15.1
$201-$250	1.8	4.1
Over $250	1.8	2.7
Inappropriate	.6	0.0
Total	166	73

Table 7

VOTE BY YEARLY INCOME LEVEL

Yearly Income	Yes	No
Less than $5000	14.1%	29.9%
$5000-$10,000	43.9	38.8
$10,000-$15,000	28.5	22.4
Over $15,000	13.6	8.9
Total	369	281

Table 8

VOTE BY LENGTH OF TIME IN SCHOOL DISTRICT

Length of Time in School District	Yes	No
1 year or less	1.3%	1.7%
1-3 years	10.1	9.8
More than 3 years	88.6	88.6
Total	386	297

Table 9

VOTE BY EDUCATION (MALE)

Education Level	Yes	No
Less than jr. high	1.4%	2.6%
Jr. high	10.8	17.2
High school	33.6	44.6
Some college	20.0	23.6
Completed college or more	33.6	12.0
Inappropriate	.6	0.0
Total	360	267

Table 10

VOTE BY EDUCATION (FEMALE)

Education Level	Yes	No
Less than jr. high	1.3%	3.9%
Jr. high	8.6	16.2
High school	45.8	49.6
Some college	21.7	23.3
Completed college or more	22.3	7.5
Inappropriate	.3	.4
Total	373	266

Table 11

VOTE BY NUMBER OF CHILDREN IN FAMILY

Number of Children	Yes	No
No children	10.3%	12.7%
One child	9.8	15.4
Two children	29.8	30.8
Three children	21.1	18.2
Four children	15.7	11.6
Five children	7.5	5.5
Six children	2.6	2.1
More than six children	3.1	2.4
Inappropriate	.3	1.4
Total	389	292

Table 12

VOTE BY CHILDREN OF SCHOOL AGE

School Age of Children	Yes	No
Grammar school only	17.1%	11.7%
Junior high only	3.4	2.8
High school only	8.3	6.9
Grammar school and jr. high	8.8	2.8
Grammar school and high school	7.0	3.1
Jr. high and high school	7.2	2.8
Grammar school, jr. high, high school	5.2	3.8
Inappropriate (no children or children beyond school age)	43.2	65.9
Total	387	290

Table 13

VOTE BY RATING OF TEACHERS IN DISTRICT

Rating of Teachers	Yes	No
Good	58.7%	34.6%
Somewhat good	33.0	42.4
Somewhat bad	4.9	10.2
Bad	1.3	4.2
Don't know	2.1	8.5
Total	385	283

Table 14

VOTE BY RATING OF ADMINISTRATORS IN DISTRICT

Rating of Administrators	Yes	No
Good	51.7%	17.5%
Somewhat good	34.1	34.4
Somewhat bad	7.8	24.4
Bad	3.1	12.2
Don't know	3.4	11.5
Total	387	279

Table 15

VOTE BY RATING OF SCHOOL BOARD IN DISTRICT

Rating of School Board	Yes	No
Good	50.0%	20.8%
Somewhat good	34.5	33.9
Somewhat bad	6.3	19.0
Bad	3.4	9.9
Don't know	5.8	16.4
Total	380	274

Table 16

VOTE BY CHOICE OF SCHOOL DISTRICT FOR CHILD

Choice of district	Yes	No
Leave child in district	76.7%	66.9%
Move child to another district	17.5	21.6
Indifferent about moving child	3.3	6.1
Don't know	1.6	3.7
Inappropriate (no children or children beyond school age)	.8	1.6
Total	365	245

Table 17

VOTE BY RATING OF TEACHERS' SALARIES IN DISTRICT

Rating of Teachers' Salaries	Yes	No
Too much	3.6%	20.1%
About right	64.7	64.2
Too little	28.4	6.9
Don't know	3.3	8.7
Total	391	288

Table 18

VOTE BY RATING OF ADMINISTRATORS' SALARIES IN DISTRICT

Rating of Administrators' Salaries	Yes	No
Too much	26.0%	52.9%
About right	53.5	27.0
Too little	9.5	1.4
Don't know	11.1	18.7

Table 19

VOTE BY AVAILABILITY OF INFORMATION ABOUT SCHOOLS

Information Obtained	Yes	No
Very easily	30.1%	16.8%
Easily	47.6	33.7
With difficulty	15.9	33.0
With much difficulty	4.4	12.5
Don't know	2.1	4.0
Total	389	273

Table 20

VOTE BY PARENTAL EXPERIENCE AS A STUDENT

Parental Experience	Yes	No
Liked school	88.3%	87.7%
Did not like school	11.7	12.3
Total	383	276

Table 21

VOTE BY CURRENT PROPERTY TAX ASSESSMENT

Amount Assessed	Yes	No
Don't know	15.3%	16.2%
Under $100	12.2	5.4
$101-200	23.5	23.2
201-400	27.8	28.2
401-600	10.1	11.2
601-800	3.4	6.2
800-1,000	.3	2.5
Over 1,000	3.7	6.6
Inappropriate	3.7	.4
Total	327	241

Table 22

VOTE BY PROPERTY TAX AS A PERCENTAGE OF FAMILY INCOME

Percentage of Family Income	Yes	No
1%	27.1%	14.7%
2	28.9	17.8
3	18.0	22.3
4	9.4	10.2
5	6.8	11.2
6	1.5	3.6
7	1.5	2.5
Over 7%	6.8	17.8
Total	266	197

Table 23

VOTE BY PROPERTY REEVALUATION WITHIN THE LAST YEAR

Property Reevaluated within Last Year	Yes	No
Yes	65.5%	67.6%
No	29.7	30.5
Inappropriate	1.1	0.0
Don't know	3.6	1.8
Total	357	275

Table 24

VOTE BY INCREASE OF SCHOOL TAXES WITHIN THE LAST YEAR

School Taxes Increased within Last Year	Yes	No
Yes	57.8%	71.5%
No	32.8	21.2
Inappropriate	1.2	0.0
Don't know	7.9	7.3
Total	341	274

Table 25

VOTE BY SUPPORT OF SPECIAL LEVY IN LAST PREVIOUS ELECTION

Support of Special Levy in Last Election	Yes	No
Yes	98.4%	39.9%
No	1.6	59.7
Inappropriate	0.0	.4
Total	375	268

Table 26

VOTE BY SUPPORT OF SPECIAL LEVY IN ANY PREVIOUS ELECTION

Support of Special Levy in Any Previous Election	Yes	No
Yes	96.2%	73.9%
No	3.8	25.6
Inappropriate	0.0	.5
Total	239	211

Table 27

FACTORS INFLUENCING VOTE DECISION

FACTORS		Number
Positive		
Have always supported education, it's necessary		122
Needs of the school district		112
Children in school		101
Children need education		81
I work for the school		20
Negative		
Money		149
Taxes too high	108	
Criticism of the levy or levy system	31	
Other	10	
Criticism of school administration		53
Criticism of curriculum		14
Poor money management, waste		69
Criticism of physical plant use		16

Table 28

SCHOOL SERVICES WHICH SHOULD BE CUT

Service	Number
Personnel, academic, nonacademic, administrators	417
Extracurricular activities	361
Special classes (kindergarten, vocational-technical training, special education)	127
Text books and supplies	107
Transportation	98
Maintenance	95
Other	26

Table 29

HOW PEOPLE SHOULD PAY FOR SCHOOLS

Tax	Number
Property tax	282
Income tax	239
No (or reduced) charge for elderly	198
Other (everyone should pay, tax on renters, lottery)	147
Only people with children should pay	75
State	49
Sales tax	38
No charge for people whose children are in private schools	28
Federal	20

Table 30

CRITICISM OF THE SCHOOLS BY THOSE WHO VOTED "NO"

Criticism	Number
Criticism of teachers and administrators	70
Criticism of physical plant and facilities	42
Criticism of curriculum	36
Criticism of money management and high levies	122
Criticism of students	13
Criticism of the tax system	26
Other	29

SUMMARY OF EDUCATION RESEARCH ON EFFECT OF SIZE ON SELECTED ASPECTS OF THE EDUCATION PROCESS

THE EFFECT OF SIZE ON SELECTED ASPECTS OF THE EDUCATION PROCESS

Introduction

For a good many years considerable interest has been focused on the effect of school size on various aspects of the educational process. This report brings together research efforts concerned with the question of adequate size of local school districts. While this review is not all inclusive, the effort was made to consider a representative sample of research dealing with the most commonly used measure of a local school district size – pupil enrollment. In this report, the treatment of adequate size deals with the total number of pupils enrolled in a local school system or in a single attendance center within a local district.

For the purposes of this report, the size criterion, as measured by the number of pupils enrolled, will be the principal variable. Relationships will be considered between enrollment and the following factors: pupil achievement, educational costs, breadth of educational program, extracurricular activities, professional staff qualifications, and special services.

Size of Enrollment and Pupil Achievement

In reviewing the research material relating to size and pupil achievement, it appears that the secondary school level has received the greatest share of attention. However, the few research efforts identified at the elementary school level suggest a positive relationship between school size and pupil achievement.

As far back as 1932, Nelson surveyed the literature relating to elementary pupils' achievement and the size of school attended. He noted that 22 of 24 researchers found a higher level of academic achievement in the larger schools. However, his study of the San Francisco area elementary schools was inconclusive and this led him to caution against assuming that large size guarantees educational efficiency.[1]

More recently, Street, Powell, and Hamblin concluded that Kentucky seventh and eighth graders in schools with 300 or more pupils demonstrated higher achievement than those in schools with enrollments of 100 to 299, or with fewer than 100 pupils.[2] The size of schools in the Kentucky sample were relatively small; of the 112 schools studied, 47 were one-room rural schools, and the largest attendance center in the sample enrolled 836 children.

Theophilus restricted his sample of Iowa elementary schools to single attendance centers with 200 or more pupils. He reported that pupil achievement, as measured by the Iowa test of Basic Skills, definitely increased as attendance center size increased.

Many studies focusing on secondary schools have found a high positive correlation between school size and academic achievement. For example, Kreitlow paired ten Wisconsin school districts on the basis of whether they were reorganized administrative units. He used achievement test results for first graders and observed slightly higher achievement by children in nonreorganized districts.[4] However, achievement tests administered to the same pupils during sixth, ninth and twelfth grades showed that no correlation existed between size and ninth-grade achievement as measured by standardized tests.[5]

Using the Iowa Test of Educational Development, Gray concluded that pupils in Iowa high schools with enrollments exceeding 1,000 had the greatest "gain score." Pupils in high schools of 400 to 999 enrollment achieved the highest composite scores.[6] Contradictory findings were recently reported in another Iowa study in which 323 high schools constituted the sample. Stout and Rudolph stated the relationship of student academic achievement to size was not statistically significant.[7] An earlier Iowa study tended to refute this conclusion and to strengthen Gray's observations. In his 1960 investigation, Feldt analyzed scores from the 1959 Iowa Tests of Educational Development taken by 80 percent of Iowa's high school students. This analysis indicated the differential in the senior year between the largest and the smallest high school amounted to a full year's academic growth.[8]

For purposes of research with college-bound seniors, Arkansas high schools were placed in five enrollment size classifications: 150 students or less, 200 to 350, 400 to 550, 600 to 750, and over 750. Achievement was based on American College Test scores. Seniors from schools in the three largest classifications had significantly higher composite scores than those from the two smallest classifications.[9]

Similar findings for 46 Nebraska high schools were reported by Jantze, who noted that scholastic attainment increased as school size increased up to a point somewhere in the 400 to 799 enrollment range. Above 800, achievement began to show a gradual decrease.[10]

With reference to the exceptional high school senior, those in the upper 10 percent, at least one researcher disagreed with some of the findings previously cited. He concluded that size of school is not an important factor when the exceptional student's achievement is measured by standardized tests.

Small school proponents frequently contend that student dropout rate is much lower in the small high schools than in the larger secondary attendance centers. Empirical evidence in support of this contention was not uncovered. In fact, two of the studies reviewed did indicate that holding power of high schools is not related to total enrollment. Hartung analyzed dropout rates in 22 Illinois schools outside the Chicago area and found no statistically significant differences in large and small high school dropout rates.[12] Similar findings for Iowa schools were reported by Opstad, who concluded that school size *per se* is not related to a school's holding power.[13] Ford reported a study which indicated that during 1964-65 in Washington State counties where small high schools included in this study were located, the dropout rate was six percent. In the most densely populated counties of Washington, which included the Seattle-Tacoma complex and Spokane, the rate ranged from 3.69 to 3.99 percent. The state average was 3.89 percent. According to statistics released by the Oregon State Department of Education, the same situation prevails in that state. Hard data support the idea that there is an inverse relationship between the size of schools and the percentage of high school dropouts in the two most populous states in the Northwest region.[54]

Student success in college and its relationship to the size of the secondary school attended also has been a popular subject for the researcher.

Weaver stated that graduates of large North Carolina high schools averaged more college credit hours from freshman through senior year than did graduates of small schools. Further, graduates of small North Carolina high schools had lower college grade-point averages from freshman through senior year than did graduates of larger schools. The graduates of large high schools, when compared with graduates of smaller schools, were less prone to failure in college and more likely to graduate.[14] Carefully documented studies in Oregon indicate graduates of high schools with enrollments of 100 students or less do significantly less well in freshman college studies than do their peers from large high schools.[54]

When related to college success, the optimum enrollments in Iowa secondary attendance centers were found to be between 400 and 999. Graduates of high schools in this category had not only the highest proportion of graduates enrolled in college, but they obtained higher college freshman grade-point averages than did students from smaller or larger schools.[6]

However, a 1959 study of 127 seniors at Central Michigan University indicated those seniors who had graduated from large high schools did not have college grade-point averages significantly higher than graduates of smaller schools.[15] Furthermore, a negative relationship between high school size and college success was noted for 637 Texas A&M agriculture students who had ranked in the lower quartile on achievement and aptitude tests in high school.[16]

One researcher concluded that the pattern of studies completed by a high school student influences college achievement more than does the size of the secondary school. He concluded, therefore, that if the small high school could offer the diversity of courses usually found in the larger school, there would be no difference in college achievement between graduates of small and larger schools.[17]

The Ohio School Survey Committee reported that students from high schools with enrollments under 250 were generally less well prepared for college and made poorer college records than students who had graduated from schools with more than 250 pupils.[18]

Pupil achievement has been considered also in terms of the number of Ph.D's granted to graduates of secondary schools of various sizes. The findings strongly favored the larger schools.[19]

Failure to complete college has also been considered in relation to size of high school. From a study of 617 students who had withdrawn from the University of Arkansas, the withdrawal rate was significantly greater among graduates of small schools. However, when the factor of mental ability was held constant, size of the secondary school attended was of little consequence.[20]

Size of Enrollment and Educational Costs

Most studies relating school size to educational costs have focused on the secondary schools. However, Grieder reported the point of greatest economy was reached in elementary schools with an enrollment of 400 children. According to the same writer, peak economy was attained in secondary schools of 500 students.[21]

Other researchers, including C. B. Smith,[22] have stressed cost advantages as school size increased to the 800 to 1,200 pupil range. It appears that above this range, cost factors increase as school size increases. Morris, who called attention to high costs per pupil in schools with enrollments below 200, suggested that per-pupil expenditure tended to level off after enrollment exceeded 600.[23] In one Iowa study it was reported that the lowest secondary school costs were found in schools in the 500 to 800 pupil range.[7] Another study in Iowa suggested 1,000 as the optimum secondary enrollment figure for fiscal efficiency.[6]

One writer stated that the greatest increase in per-pupil expenditure occured as secondary school enrollment fell below 350 students.[24] Peck's results were similar in that per-pupil expenditures and size were inversely related, and the greatest cost increase came about as enrollment dropped below 350.[25]

Studies of district-wide educational costs have also established an inverse relationship between size and cost. This relationship seems to hold when subdistricts in large metropolitan school districts are considered.[26] An upper limit of the inverse ratio was established by Hansen, however. Focusing upon the total cost of educational programs in grades one through 12, he investigated 589 school districts in 10 states. District size ranged from 1,500 to over 846,000 with a median of approximately 50,000 pupils. Hansen asserted that unit costs declined consistently as district size rose to approximately 20,000 students.[27]

An earlier recommendation specified 10,000 as the optimum enrollment for economic efficiency.[28] Knezevich, in turn, suggested that a local school district needs 10,000 to 12,000 pupils to provide a desirable educational program at a reasonable cost per pupil.[29] In a recent doctoral study, Rajpal limited his district-wide consideration to the secondary level only. He found the mean instructional expenditure for Iowa high schools per resident student in average daily attendance decreased consistently from $579 in districts with secondary enrollments of 51 to 100, to $354 in districts with 801 to 6,000 high school students.[30]

Morphet, Johns, and Reller, in a recently published work, also looked at effects of school size variations on fluctuations in unit costs. They suggested that in districts with fewer than 1,200 pupils, high costs deterred provisions for needed educational opportunities. It was noted, however, that beyond the 50,000 level of enrollment, costs tended to rise again and increased as much as $10 per pupil in the very large districts. It appeared, therefore, that cost factors dictate a minimum enrollment of 10,000 pupils within a school district. These writers stated that the optimum enrollment for economic efficiency was 40,000 to 50,000.[31]

The Committee on Educational Policy approached optimum size from standpoints other than costs. They felt school districts with a pupil population larger than 150,000 are prone to bureaucratic rigidities and impersonal responses, and are likely to produce an unhealthy tension between concerned parents on the one hand and top school officials and board members on the other. Even districts below 150,000 pupil population can become ossified unless provisions are made for the delegation of discretion and authority to appropriate substructures.[55]

Size of Enrollment and Breadth of Educational Program

Much of the research concerned with size of educational program relationships has been limited to the secondary level or to district-wide investigations. However, one study concluded California districts operating only elementary schools with enrollments of less than 900 were too small legally and practically to assume full responsibility for the nature and quality of the educational program. The same conclusion was deemed applicable to unified K-12 districts of fewer than 1,500 students and high school districts enrolling fewer than 300 students.[32]

Most of the literature reviewed at the secondary level favored the larger schedules. The typical Texas high school with 200 or fewer students, for example, offered an average of 11 subjects while a school with an enrollment range of 201 to 500 offered 18 subjects. High schools enrolling 500 or more pupils average 27 subject offerings.[33] In an Ohio study in which high school programs were evaluated, it was found that no high schools with fewer than 200 students were considered satisfactory. It was not until the 500-pupil level was reached that a majority of the schools received the satisfactory rating.[18]

The Morris Survey of secondary schools in nine southern states showed a direct and postive relationship between curriculum variety and level of enrollment.[23] Iowa findings were similar in that the state's largest high schools had more curricular offering than schools in any other size category.[30]

North Carolina also gives evidence to support the conclusion that larger high schools offer a more varied program of studies. It was shown that small North Carolina secondary schools schedule more courses on an alternate year basis than do the larger schools.[14] A 1961 National Education Association survey concentrated on course offerings in math, science, and foreign languages. It was found that among all secondary schools with fewer than 300 pupils in average daily attendance, 10 percent offered no chemistry; 20 percent did not have a course in physics; 40 percent did not offer trigonometry; and 29 percent failed to offer a foreign language.[34]

Recent writings in educational administration have urged support for the concept that breadth of secondary education programs requires sizable enrollments. Van Miller observed that many authorities suggest that in most cases curriculum needs dictate high school enrollments of 700 to 1,500 or larger.[35] Knezevich also called attention to statements by writers in the field of education who advocate a minimum enrollment figure of 400 to 500 students to help insure quality programs. He also noted that the same writers have specified 1,500 as the minimum enrollment for a school district.[36]

Of the several secondary school studies reviewed, Woodham's conclusions were most unusual. From his doctoral research in Florida schools, he noted a tendency for increases in curriculum offerings to decelerate after a certain enrollment point is reached. He concluded that course offerings increase rapidly as size increases to approximately 450 pupils. Above that number, the rate of increase in number of offering slows appreciably.[24]

When the entire school district is studied, research findings seem to favor the larger school systems. According to Sargent, "evidence from several state studies, particularly those in Ohio and New Hampshire, seems clearly to establish the general relationship between size of district and the quality of education."[37] Faber corroborated Sargent's basic postulate when he reported what his own review indicated that all districts rated high in "breadth of curriculum" had enrollments in excess of 9,000 pupils.[38] Clark[39] and Rajpal[30] have come up with similar findings.

Various educational writers have cited fairly specific enrollment figures as criteria for adequacy of educational programs. Three recent texts provide excellent examples. Knezevich suggests that a comprehensive education program would require a district-wide enrollment of at least 10,000. He commented, however, that an effective intermediate unit (regional educational service agency) could provide needed programs and services in sparsely settled areas. Under such conditions, a minimum enrollment of 2,400 pupils could be considered acceptable.[36] Campbell, Cunningham, and McPhee suggest that no school district carry less than 2,000 children enrolled at any given time with 10,000 as an optimum enrollment figure to assure program quality.[40] Lane, Corwin, and Monahan call attention to earlier recommendations for at least 12,000 students as assurance of adequate programs. Looking to the future, they suggest that 12,000 pupils may prove to be too few. A minimum enrollment of 10,000 was proposed as a current and realistic minimum criterion, if the district is to furnish adequate programs and services for its students.[41]

Size of Enrollment and Extracurricular Activities

It is logical to assume that the quality and scope of secondary schools' extracurricular programs might be pertinent to the question of adequate school size. Apparently, such a relationship has not received research attention as only a few studies were identified that even remotely touched on this point.

One researcher concluded that Indiana high school activity programs, evaluated by criteria set by the North Central Association of Colleges and Secondary Schools, were improved after school district reorganization. Activity programs in high schools in reorganized districts were rated significantly higher than their counterpart in nonreorganized districts.[42]

The limited empirical evidence about pupil participation and evaluation of extracurricular activities was somewhat contradictory. Results of a study of Iowa high schools indicated pupil activity was greatest in secondary schools with enrollments of 150 to 399. Students in schools within this size bracket also rated their extracurricular programs higher than students in schools in any other size category.[6] In contrast, a second researcher in the same state reported no relationship between school size and extent of pupil participation in extracurricular activities.[13]

Woods, in his study of Southern California high schools, approached the question from a different perspective. He considered parent reaction and found the most favorable parental reaction to the extracurricular program offering was in the school size range 1,200 to 1,599 students.[43]

It is significant that in these times of extensive local district reorganization, one researcher reported a "definite and consistent relationship between participation in school activities and the distance from home to school."[44]

Size of Enrollment and Professional Staff Qualifications

Research seems to indicate that a positive relationship exists between measurable professional qualifications of teachers and size of enrollment. It is possible to cite several pertinent findings. An Arkansas investigator established an inverse relationship between school size and the number of teachers with emergency certification, and the number of teachers instructing outside their major field of preparation. He discovered, too, that the relative number of teachers with advanced degrees increased with size of school.[45]

The study of secondary schools in nine southern states, referred to earlier, found that the larger the enrollment, the greater the percentage of teachers holding a master's degreee, and the lower the percentage of teachers without a bachelor's degree.[23]

De Good compared Ohio high schools with a 500 to 700 pupil enrollment with those having 200 or fewer pupils. He found that teachers in smaller schools received lower slaaries, had fewer years of teaching experience, and were less likely to hold an advanced degree.[46]

Another researcher reported a direct relationship between size and the percentage of experienced teachers, the percentage of teachers with standard certificates, the percentage of teachers with degrees from out-of-state colleges and universities, and the number of pupil units taught by certified teachers. The amount of college training of the teachers, the percentage of women teachers, and salary levels were related directly to size of school.[47]

In another study, all public high school districts in Iowa were divided into eight size classifications. When mean qualifications of teachers were compared with school size, the largest districts had the more experienced staffs with better academic preparation.[30]

Specific minimal or optimal enrollment recommendations, based upon the factor of teacher qualifications, were not discovered in the literature. Obviously, however, many writers considered staff needs and qualification when proposing minimum and optimum enrollments based upon other important factors.

Two recently published texts clearly illustrated the point that various other personnel considerations might be pertinent to the question of the proper size of a school. Miller observed that a few authorities have insisted an elementary attendance center should be of a size conducive to professional stimulation and flexibility. To achieve these goals, it has been suggested that each elementary school should have at least two classes, or sections, per grade level.[35] Thus, if 25 to 1 is accepted as a fairly standard pupil-teacher ratio, a single K-6 attendance center should have a minimum of 350 pupils.

As previously indicated, Campbell, Cunningham, and McPhee suggested 2,000 students as a minimum and 10,000 as an optimum for school districts. They also recommend a 40,000 maximum in city school districts with emphasis on the desirability of subdistricting; they reasoned that when enrollment in a district exceeds 40,000, it is too large and runs the risk of becoming bureaucratic.[40]

Size of Enrollment and Special Services

The special services considered here are supplementary and include guidance, counseling, and psychological services. Also included are services and programs classified under the heading of special education. These cover remedial classes and special classes for exceptional or handicapped children.

The literature is plentiful on the subject of special programs and services as they relate to the size of districts, particularly in the area of special education in which incidence ratios and pupil population totals are extremely important. In all special service fields, scholars such as Dawson[48] and Conant[49] have provided meaningful data concerning the desirable numbers of pupils receiving special programs and services. A detailed review of the abundant research relating school size to provision of special services, is, however, far beyond the scope of this report. Only a few illustrative examples are presented here.

The guidance program, particularly at the secondary level, has received a great deal of attention. A majority of the studies reviewed deal primarily with counselor-student ratios; Conant's recommendations of one counselor for every 300 or 400 students are referred to frequently in more recent literature.[19] Hecher, who studied high school dropouts, can be included among the staunch advocates of effective guidance services for secondary students. His recommendation is to have one full-time counselor serve a maximum of 500 students.[50]

The North Central Association of Colleges and Secondary Schools has recommended that all schools enrolling fewer than 300 pupils should provide at least one half-time guidance counselor, and that schools with enrollments in excess of 300 should have one full-time counselor for every 500 students.[51]

The National Health Survey for July 1957, to July 1958, points out that for each 1,000 children under 15 years of age, 41 had a chronic or permanent defect which would necessitate special educational provisions. For those requiring special services, 8 percent had visual difficulties, 15 percent had auditory problems, 26 percent had speech defects, 36 percent had orthopedic problems, and 14 percent experienced a variety of other difficulties.[52] The National Health Survey percentages are representative of some of the problems confronting the public schools in providing special services.

The size of a school district is obviously related to ability to provide the necessary special programs and services. Patterson's doctoral research showed the professional qualifications of special service personnel have a parallel increase with school size.[47] De Good reported similar findings and observed that guidance programs in Ohio's smaller high schools were weaker than those in the larger schools.[46] Gray found that secondary schools enrolling 400 to 999 students ranked highest in terms of employment of certificated counselors and number of counseling hours available to students. However, when consideration was given to employment of qualified librarians and number of librarian hours available to students, the highest ranked schools were in the 1,000 or more category.[6]

Other applications of the size criterion to special services for students are noted in the literature, but these are not within the intended scope of this report. Attention should be given to the standards set for library services, personnel, books, and materials, by the North Central Association of Colleges and Secondary Schools.[51] and the American Library Association.[53] These standards are based upon the size criterion as measured by number of pupils enrolled.

Conclusions

Because of the multitude of variables uncovered, it is not possible to provide the magic numbers to determine an adequate school size. However, with the available research, conclusions, recommendations, and opinions, there is sufficient commonality apparent to allow for a few generalized conclusions. The research and related literature reviewed indicate several factors concerning the size of both the local district and the attendance centers within the district.

Most of the studies reviewed pointed to a direct and positive relationship between size of school and six pertinent factors: pupil achievement, educational cost, breadth of educational program, extracurricular activities, professional staff qualifications, and special services. Up to an optimun enrollment level, still unspecified except in pupil-number range, schools appear to improve in terms of many of the factors. This leads to some evidence for support of the contention that larger school districts should be formed in many areas of the United States. Paradoxically, there is also evidence to indicate that some school districts are too large in terms of the relationships between some of the factors and the enrollment criterion.

Enrollment recommendations for elementary attendance centers are not plentiful, but based upon the studies reviewed, the consensus indicates that a 300 to 400 pupil elementary school is recommended.

Relationships between the size variable and each of the following factors support the preference for a secondary school described, however ambiguously, as "medium sized."

Pupil achievement favored, in general, a secondary attendance center enrolling slightly in excess of 1,000 students. Educational cost, according to the evidence available, suggests a slightly larger school. It appears that there is an optimum enrollment somewhere in the 1,000 to 1,500 pupil range, since at this point, unit costs no longer decrease significantly as enrollment increases. Breadth of educational program and special services also call for a secondary school of slightly more than 1,000 students.

Considerable variance was discovered regarding district size. It can by hypothesized that much of this contradiction stems from varying conceptions of the needs and responsibilities for special services. Several authorities took into account the supporting services of an intermediate district structure when thinking in terms of district size. In such cases, lower enrollments were cited as optimum, because it was assumed that the intermediate agency would provide various special services and programs on an area basis.

A student population of 10,000 for a single school district was most frequently mentioned as the minimum number in terms of a majority of the seven factors. The recommended student population ranges anywhere from 1,000 to 50,000. But as educators talk in terms of an eventual reduction in the years ahead of from 5,000 to 10,000 local school districts in the United States, it is obvious that the trend is toward larger minimums. For most educators and educational policy makers, this is a step in the right direction.

FOOTNOTES

1. Thomas L. Nelson, "A Comparison of the Achievement of Pupils of One or More Teachers with That of Pupils in Schools with Eight or More Teachers," Diss. Berkeley: University of California, 1932.
2. Paul Street, Jane H. Powell and John W. Hamblin, "Achievement of Students and Size of School," *Journal of Educational Research* 55 March 1962, pp. 261-66.
3. Wadhawa Singh Theophilus, "Relationship Between Size of School and Expenditures and Quality of Education in Elementary Schools," Diss. Ames: Iowa State University, 1954.
4. Burton W. Kreitlow, "Reorganized Districts of Wisconsin," *Special Bulletin* (Madison: University of Wisconsin, 1961).
5. D. H. Bragg, "A Study of Size-Cost-Achievement Relationships in Reorganized School Districts in Wisconsin, Diss. Madison: University of Wisconsin, 1960.
6. Stuart C. Gray, "A Study of the Relationship Between Size and the Number of Secondary Schools in Iowa," Diss. Iowa City: University of Iowa, 1961.
7. Jerry B. Stout and Wayne A. Rudolph, "Does Size Make a Difference?" (Iowa City: University of Iowa, January, 1967). (Mimeographed)
8. Leonard S. Feldt, "The Relationship Between Pupil Achievement and High School Size," (Iowa City: University of Iowa, 1960). (Mimeographed)
9. Fay W. Smith, "An Analysis of the Relationship of Size of An Arkansas High School and the Achievement of College Bound Seniors," Diss. Conway: Arkansas State University, 1961.
10. Ralph D. Jantze, "An Analysis of the Relationship of Accreditation, Finance, and the Size of Nebraska High Schools to Scholastic Achievement," Diss. Lincoln: University of Nebraska, 1961.
11. Kenneth E. Anderson, C. Page Tate and Herbert A. Smith, "A Study of the Variability of Exceptional High School Seniors in Science and Other Academic Areas," *Science Education,* 42, Feb. 1958, pp. 42-59.
12. Maurice Hartung, "Is There An Optimum Size for a High School?" *School Review* 61 Feb. 1953, pp. 68-72.
13. Paul E. Opstad, "Nonscholastic Factors Associated with Dropouts from Public Schools in Iowa," Diss. Iowa City: University of Iowa, 1958.
14. Charles H. Weaver, "The Influence of Size Upon the Quality of the High School," Diss. Chapel Hill: University of North Carolina, 1961.
15. Esther Rogal Altman, "The Effect of Rank in Class and the Size of High School on the Achievement of the Central Michigan Senior Class of 1957." *Journal of Educational Research,* 52 April 1959, pp. 307-09.
16. J. R. Bertrand, "The Relationship Between Enrollment of High Schools from which Students Graduated and Academic Achievement of Agricultural Students: Texas A&M College," *Journal of Experimental Education,* 25 Sept. 1956, pp. 59-68.
17. Irvin T. Lathrop, "Scholastic Achievement at Iowa State College Associated with High School Size and Course Pattern," *Journal of Experimental Education,* 29 Sept. 1960, pp. 37-38.
18. Ohio Education Association, "The Relationship Between Academic Achievement of Students in College and the Size of High School from Which They Were Graduated," *Report of the Education Council,* (Columbus: The Association, 1959), pp. 7-10.
19. Lindsay Harmon, "High School Backgrounds of Science Doctorate," *Science,* 133 March 1961, pp. 34-54.
20. Elbert L. Dickenson, "Analysis of the Relationship of Size of Arkansas High Schools to Academic Success of Graduates in the First Year at the University of Arkansas," Diss. Fayetteville: University of Arkansas, 1958.
21. Calvin Grieder, "Relation of School District Reorganization to Finance in Business Administration," *Review of Educational Research,* 17 April 1947, pp. 167-77.
22. C. B. Smith, "Study of the Optimum Size of Secondary Schools," Diss. Columbus: Ohio State University, 1961.
23. Harold J. Morris, "Relationship of School Size to Per Pupil Expenditure in Secondary Schools in Nine Southern States," Diss. Nashville: George Peabody College for Teachers, 1964.
24. William J. Woodham, Jr., "The Relationship Between the Size of Secondary Schools, the Per-Pupil Cost and Breadth of Educational Opportunity," Diss. Gainesville: University of Florida, 1951.
25. Roderick B. Peck, "The Influence of Enrollment and Expenditure Upon Quality of Education in Iowa School Districts Maintaining High Schools," Diss. Ames: Iowa State University, 1952.

26. Julian E. Butterworth, *Improving Educational Opportunities in Rural Areas,* University of the State of New York Bulletin No. 1322 (Albany: New York State Department of Education, August 1, 1946).
27. N. W. Hansen. "Economy of Scale in Education. An Analysis of the Relationship Between District Size and Unit Cost in the Public Schools," Diss. Stanford University, 1964.
28. Roe L. Johns and Edgar L. Morphet, "Relation of School District Reorganization to Finance in Business Administration," *Review of Educational Research,* 20 April 1950, pp. 115-123.
29. S.J. Knezevich, "Why Continue the Office of County Superintendent," *Nation's School,* 52 Aug. 1953, pp. 63-65.
30. P. L. Rajpal, "A Study of Relationship Between Expenditure and Quality Characteristics of Education in Iowa Public Schools," Diss. Iowa City: University of Iowa, Feb. 1967.
31. Edgar L. Morphet, Roe L. Johns, and Theodore L. Reller, *Educational Organization and Administration,* 2nd ed. (Englewood Cliffs: Prentice Hall, 1967).
32. Edgar L. Morphet and John G. Ross, *Local Responsiblity in Small School Districts,* Legislative Problems No. 1, (Berkeley: University of California Bureau of Public Administration,1960).
33. W. M. Barr, Harold H. Church, and Marion A. McGhehey, *Trends in School District Reorganization in Indiana, Bulletin of the School of Education,* 32 (Bloomington: Indiana University, Division of Research and Field Studies, 1956).
34. National Education Association, Research Division, "Subjects and Small High Schools," *Research Bulletin,* 40 May 1962.
35. Van Miller, *The Public Administration Of American School Systems* (New York: The Macmillan Company, 1965).
36. S. J. Knezevich, *Administration of Public Education* (New York: Harper and Row Publishers, 1962).
37. Cyril G. Sargent, "Rural Folk Lose Voice in Children's Education," *Phi Delta Kappan,* 38 May 1957, p. 327.
38. Charles T. Faber, "Measuring School District Quality," *American School Board Journal,* 149 Oct. 1964, pp.11-12.
39. Harold F. Clark, *Cost and Quality in Public Education* (Syracuse: Syracuse University Press, 1963).
40. Roald F. Campbell, Luvern L. Cunningham, Roderick F. McPhee, *The Organization and Control of American Schools* (Columbus: Charles E. Merrill Books, Inc., 1965).
41. Willard R. Lane, Ronald G. Corwin and William G. Monahan, *Foundations of Educational Administration* (New York: Macmillan Company, 1967).
42. Walter K. Kent, "Educational Opportunities in Nine Reorganized High Schools," Diss. (Bloomington: University of Indiana, 1958).
43. Thomas E. Woods, "Relationship of High School Size to Curricular Offering," Diss. Stanford University, 1957.
44. Don L. Morgan, "The Relationship of the Distance from Home to School Upon Participation in Extracurricular Activities," (Iowa City: University of Iowa, January 1967). (Mimeographed)
45. Jack B. Collingsworth, "An Analysis of the Relationship of Size of Arkansas High Schools to Selected Qualifications of High School Teaching Personnel," Diss. Fayetteville: University of Arkansas, 1964.
46. K. C. De Good. "Profile of the Small High School." *Educational Leadership,* 18 Dec. 1960, pp. 180-82.
47. Harold D. Patterson, "Relationships Between Size of Secondary School and Selected Teacher Characteristics." Diss. George Peabody College for Teachers, 1964.
48. Howard A. Dawson, "What the Rural Elementary School Needs from the Administrative Unit," *National Elementary Principal,* 29 April 1950.
49. James B. Conant, *The American High School Today* (New York: McGraw-Hill, 1959).
50. Stanley E. Hecker, "Early School Leavers in Kentucky," *Bulletin of School Service* (Lexington College of Education, University of Kentucky, 1953) pp. 1-78.
51. The North Central Association of Colleges and Secondary Schools, *Policies and Criteria for the Approval of Secondary Schools* (Chicago: The Association, 1964) p. 19.
52. Roy L. Davis, "Quality in School Health Administration," *The National Elementary Principal* 39 Feb. 1960.

53. American Association of School Librarians, *Standards for School Library Programs* (Chicago: The Association, 1960).

54. Paul Ford, "Small High Schools; Myth, Reality, Potential," *The Bulletin of the National Association of Secondary School Principals,* 51 March 1967, pp. 89-95.

55. National Academy of Education, Committee on Educational Policy, "Policy Making for American Public Schools," Printed for the use of the Committe on Education and Labor, House of Representatives, 1969.

ANALYSIS OF COSTS:
LARGE SCHOOL STUDY

ANALYSIS OF COSTS: LARGE SCHOOL STUDY

Characteristics of the Urban Scene

The phenomenon of urbanization is the result of the continual migration of people no longer needed for farm production to the cities. The concentration of industry and the unplanned growth of metropolitan areas has resulted in the accumulation of a high density of people with highly diverse backgrounds, education, capability, interests, life style and whatever other descriptive words one might care to use. This basic heterogeneity places unusual demands upon the education system which is required to provide educational opportunity to students in such a way (the teaching process) that the client progresses to the extent of his capability. The heterogeneity of the city population, particularly in socioeconomic aspects, has increased rather than decreased in recent years.

Specific trends which have brought this about are the exodus of members of the higher socioeconomic strata to the suburbs and their replacement with those from lower socioeconomic backgrounds. In addition, forced by both overt and covert social practices and political policies, and by economic pressures, racial and ethnic groups have tended to congregate more and more in the older and evermore greatly deteriorating sections of the cities. The result is a growing disparity between the school clientele and their needs in these "ghettoized" groups and those of traditional middle class background for whose service the schools, as they have evolved, are better suited. The resulting particular needs are usually spoken of in terms of a student "deprivation," which may be "economic," "cultural," or simply "educational"–but which is essentially an admission of the many diverse problems of educating in the urban scene.

The geographical and socioeconomic stratification of society in the cities has generated other social problems such as increased crime rates and greater school irrelevancy, which add difficulty and cost to the educational program.

The Increased Demands on Educational Institutions

The factors which have given rise to urbanization–mechanization; automation; in general, technological advance–have sharply reduced employment opportunities for the unskilled, the untrained, and the uneducated. As a consequence, educational systems are required to educate *more* students in *more* areas. Absorption of unskilled laborers in the employment circle becomes more difficult each year. The responsibility of the schools in this area is compounded because those who in former times dropped out of school, but still had a place in the labor market, represent a more difficult segment of the school population to educate adequately. Thus, in the traditional learning areas, the task is more difficult. The problem is aggravated in large urban school districts because of the concentration and stratification of students who fall into this category.

In addition, the need for considerably more diverse education and other services has expanded with the growing complexity of society, requirements of universities, multiplicity of employment modes, mobility of people, and changing social and moral attitudes. This need for broader scope has also been heightened by the increased desire for more involvement in the operation of the schools by the Federal government, students, teachers, and community people. All of these tend to be accentuated in the large urban school districts and give rise to a variety of specific needs which require satisfaction.

Size and Complexity

Intuitively one expects large school districts to be operationally somewhat more efficient than smaller districts because of the possibility of centralizing some administrative and service functions. In addition, the greater financial base of a large district permits the hiring of specialists in particular administrative areas who may provide a higher level of service than those not formally trained; examples of such areas are purchasing, finance, and research. On the other hand, in very large systems, the required formality of some procedures may result in delays which may represent operational inefficienty but not necessarily cost inefficiency.

The size and complexity of a large school district such as one of the group 1 districts also poses communication and organizational problems not found in smaller districts.

Table 1

PER-PUPIL COST FOR SALARIES[1]

Size Group	Cert. Staff		Prof. & Tech.		Sec'y. Craft and Other		Empl. Bnfts.		Total	
	Teach.	Other	Teach.	Other	Teach.	Other	Teach.	Other	Teach.	Other
1	$401	$ 98	$7	$14	$ 8	$105	$21	$19	$438	$235
2	391	100	2	13	9	109	21	17	423	239
3	360	85	1	7	6	92	17	14	384	198
4	344	78	1	5	8	83	16	13	369	179
5	351	83	1	5	7	90	16	14	376	192
6	334	72	1	2	14	85	18	12	366	171
7	350	83	1	2	8	96	17	14	376	195
8	376	84	-	4	7	108	18	15	401	211
9	491	68	1	4	14	173	26	22	532	267
State Average	$ 374	$ 89	$ 3	$ 9	$ 8	$ 98	$19	$16	$404	$212

OTHER PER-PUPIL COSTS

Size Group	Suppl. & Mtl.		Contr. Serv.		Cptl. Outlay		Books		Travel	
	Teach.	Other	Teach.	Other	Teach.	Other	Text	Libr.	Instr.	Other
1	$ 13	$33	$8	$ 41	$ 6	$ 8	$ 6	$ 4	$ 2	$ 3
2	13	39	4	36	8	12	8	5	2	3
3	11	37	3	40	7	12	7	4	2	3
4	12	37	1	39	7	14	7	4	2	2
5	13	41	2	48	7	14	6	4	2	2
6	14	41	2	48	8	19	8	5	2	2
7	16	47	2	56	6	17	8	5	2	3
8	18	57	2	78	9	23	9	5	1	3
9	15	73	2	160	4	23	12	8	1	6
State Average	$ 13	$38	$4	$ 43	$ 7	$12	$ 7	$ 4	$ 2	$ 3

---

[1] J. W. Johnston and R. L. Buschbom. "Commonality Analysis, Per-Pupil Expenditure Patterns."

Purpose of This Study

The purpose of this study is to identify if possible the origin of the higher educational costs which apply to the large school districts. Because of the multiplicity of potential factors, it is necessary to examine in some detail the various cost elements of large school districts in reference to some base and to compare them in such a way that the comparisons are valid. In comparing the educational programs from school district to school district, a number of parameters are used. Costs are frequently termed in "dollars per student," class loads in "students per teacher," and overheads in "other certificated personnel per teacher." Unfortunately, direct comparisons of such parameters are frequently not valid because of variations resulting from the nature of the school funding process, the nature of the school district organization and educational program, and the difficulty of making one-to-one correspondences in the various program elements. In this study we have attempted to compensate for some of the accidental variations so that greater insight into the important factors may be gained.

General Approach

In seeking the reasons for higher costs in the group 1 school districts (see Appendix A), the following general approach was used. The total cost per pupil in group 1 districts was compared with the average cost for those in group 4 which was used as the reference level. Because the total costs were not directly comparable, adjustments for different average salary levels and class loadings were made. The adjusted costs for the group 1 districts were then compared to the average of the group 4 districts to establish a differential which more truly represented the variations in program from district to district than did the unadjusted total costs.

A survey (see Appendix C) was made of group 1 districts to determine their ideas of the origin of the excess costs, and the results were used as an aid to interpretation.

Per-Pupil Cost Comparisons

Analysis of per-pupil expenditure patterns shows higher average unit costs in size groups 1 and 2 than in the size groups ranging in enrollment down to only 500 students per district. Size group 4, with an average enrollment of from 2,500 to 5,000, was chosen as a comparison reference for the group 1 districts. The choice was somewhat arbitrary, but was made because group 4 has the lowest reported per-pupil expenditure average and the districts in a sense have the simplest organization, generally comprised of one high school, possibly one or two junior high schools, and supporting elementary schools.

In comparing the group 1 districts with the group 4 average, various program aspects have been considered to account for the cost differences.

Table 1 provides a breakdown of total school costs for the school year 1968-69 as a function of various accounting categories. Table 2 summarizes the cost information for size groups 1 and 4.

The significant point in Table 2 is that it is only the differences in salary costs which account for the difference in total per-pupil cost; other costs are about the same for the two groups. What then, are the reasons for the approximate $125 per-pupil differential between Groups 1 and 4?

Table 2

PER-PUPIL COSTS – SIZE GROUPS 1 AND 4
(Dollars per Pupil)

	Salary Costs				
	Teacher	Other	Total	Other	Total
Group 1	$428	$235	$663	$124	$787
Group 4	369	179	548	125	673
Difference	$ 69	$ 56	$125	$ (1)	$124

Salary Considerations

The average annual teacher (base) salary in the school year 1968-69 for group 1 was $8,736 and for group 4 $8,189. The difference, $547, is 6.3 percent of the group 1 salary. The corresponding difference for all certificated personnel expressed as a percentage is about the same. Although the salary differential for classified personnel in groups 1 and 4 is not known, no significant error is introduced by assuming that the differential for all salaries if 6.3 percent. This percentage can be used to normalize the group 1 salary costs (expressed as dollars per pupil) to those of group 4. Thus, 6.3 percent of $663, the group 1 average salary costs per pupil, is $42. The normalized salary cost then becomes $621, which, all other things being equal, may be compared directly with the group 4 average of $548. Similarly, the adjusted total cost per pupil becomes $745 which, again, all other things being equal, may be compared with the adjusted value of $673. The salary adjustments for all six group 1 districts (Table 3) were calculated in a similar manner and appear as the second line of Table 4. (For additional information on relative salary positions see Appendix B.)

Student–Staff Considerations

As is well known, variation in the staff loading is an important variable in its effect upon per-pupil costs. A change of one student per teacher at a class loading of 25 represents a 4 percent change in teacher salary costs per student.

The reported group 4 average pupil-teacher ratio is 25.8, whereas that for group 4 is 24.4. The percentage difference in the ratios is 5.4 percent. When this is applied to the salary costs per pupil of the group 1 average of $428 per pupil, it is equivalent to a reduction of $23 per pupil. In effect this calculation says if the average class loadings of both group 1 and group 4 districts were 25.8, the average per pupil salary cost of the group 1 districts would be $23 less. Similar calculations were made to determine the staff loading adjustments for all 6 of the group 1 districts; these are recorded on line 3 of Table 4.

Table 3

PER-PUPIL COST ELEMENTS
(Dollars per Pupil)

	Salary Costs				
	Teacher	Other	Total	Other Costs	Total Costs
Group 1	$428	$235	$663	$124	$787
Group 4	369	179	548	125	673
Seattle	461	232	694	128	822
Tacoma	510	269	778	130	908
Spokane	421	225	646	107	753
Highline	374	230	604	139	743
Edmonds	372	219	591	105	696
Bellevue	428	236	664	136	800

Table 4

COMPARISON OF PER-PUPIL COSTS FOR GROUP 1 DISTRICTS WITH GROUP 4 AVERAGE PER-PUPIL COSTS

(Dollars per Pupil)

	Group 1 Avg.	Seattle	Tacoma	Spokane	Highline	Edmonds	Bellevue
Total Costs	$ 787	$ 822	$ 908	$ 753	$ 743	$ 696	$ 800
Salary Adjustment [1]	42	64	73	72	16	(16)	33
Staff Loading Adjustment [2]	23	55	30	(8)	3	1	7
Adjusted Total Costs [3]	722	703	805	689	724	711	760
Net Differential [4]	$ 49 (6%)	$ 30 (4%)	$132 (15%)	$16 (2%)	$ 51 (7%)	$ 38 (6%)	$ 87 (11%)
Gross Differential [5]	114 (15%)	149 (18%)	235 (26%)	80 (11%)	70 (9%)	23 (3%)	127 (16%)

---

[1] The salary adjustment was calculated by multiplying the salary costs per pupil by the percentage difference between the group 1 classroom teachers' average salaries and the group 4 classroom teachers' average salaries.

$$\text{Salary Adjustment} = \frac{\text{Group 1 Salary - Group 4 Avg. Salary}}{\text{Group 1 Salary}} \text{ (Salary Costs per Pupil)}$$

[2] The staff loading adjustment was calculated by multiplying the teacher salary costs per pupil by the percentage difference between the group 4 and group 1 pupil-teacher ratios.

$$\text{Salary Loading Adjustment} = \frac{\text{Group 4 Average Ratio - Group 1 Ratio}}{\text{Group 4 Average Ratio}} \text{ (Teacher Salary Cost per Pupil)}$$

[3] Adjusted total cost is the total salary cost per pupil less the salary and staff loading adjustments.

[4] The net differential is the difference between the adjusted group 1 district total cost per student and the group 4 average cost per student of $673. It represents the excess costs of the group 1 districts on a comparable basis with each other and with the reference base, the group 4 average. The percentage is based on total cost per pupil.

[5] The gross differential is the difference in unadjusted total costs per pupil between the group 1 districts and the group 4 average. These differentials are not comparable on a district-to-district basis because of the different salary and staff-loading characteristics.

Table 5

RELATIVE COST ADJUSTMENTS–GROUP 1 DISTRICTS

	Group Avg.	Seattle	Tacoma	Spokane	Highline	Edmonds	Bellevue
Percent of Gross Differential Accounted for by Salary Differential	37%	43%	31%	90%	23%	(70)%	26%
Percent of Gross Differential Accounted for by Staff Loading Differential	20	37	13	(10)	4	4	6
Percent of Gross Differential Unaccounted for	43	20	56	20	73	166	68
Gross Differential (Dollars per Pupil)	$114	$149	$235	$80	$70	$23	$127

Adjusted Cost Comparisons

In considering Table 4 one must keep in mind that there is undoubtedly considerable variation in the reporting of the data (which have been used in this study). For example, in a district using the traditional self-contained classroom approach, the identification of classroom teachers is not difficult. On the other hand, in a district which uses open classrooms, team teaching, specialists and aides, the reporting of personnel as "classroom teachers" or "specialists" may be a subjective judgment of the reporter. Despite the uncertainties introduced by the lack of precision in identifying staff, Table 4 provides useful insight with respect to the comparison of group 1 schools with the group 4 average. The following items are noteworthy:

- The salary adjustment alone accounts for 23 to 90 percent of the gross differentials for 5 of the 6 districts (Table 5). In one district the average salary cost was less than the group 4 average.
- The staff loading adjustment was significant for only 2 of the 6 districts, Table 4. Staff loading of the other four was similar to the group 4 average. One district reported a pupil-teacher ratio of more than the District 4 average.
- For the districts having a gross differential of greater than $100 per pupil, the percentage unaccounted for–the net differential–by salary or staff loading adjustments ranged between 20 and 68 percent, corresponding to a range of $16 to $132 per pupil.
- The net differential was no more than 7 percent of total costs for 4 of the 6 districts (Table 4, line 5), whereas the corresponding gross differentials ranged up to 18 percent.

From the data of Tables 4 and 5, it can be concluded that raw cost comparisons used alone in comparison of school programs can give a somewhat distorted picture.

Survey Results

The results of a survey (see Appendix C) of the group 1 schools were used to help pinpoint specific program features which might account for the differentials between the group 1 districts and the group 4 average. The data were compiled in broad categories and ranked according to the amount of excess costs, expressed as a percentage of the total, devoted to each item.

Information from the survey is summarized in the following section for those districts responding. Some interpretive comment is also provided.

1. Bellevue (estimated excess costs, $88 per pupil)

   Results of the Bellevue survey disclosed the strong belief that high salary costs, both certificated and classified, constituted the biggest single item of the excess costs, almost 70 percent. Program and construction planning and research accounted for another 10 to 15 percent.

   Provision of aides and payment for work formerly done as part of a teacher's job was thought equivalent to 5 percent of the excess costs.

   Negotiation costs, motivational (drop-out prevention) programs, security, and field trip expense, were each estimated at one to two percent of the excess.

   The remainder included no items of more than $1 per student.

   From the responses to the survey, it is apparent that suburban Bellevue has few of the typical problems of the large urban district. Expenditures for the disadvantaged are nil, spending for remedial programs low, and subsidy or provision of special pupil services is minor. It appears that a very high fraction of the educational funds goes directly into educational programs as opposed to peripheral services.

2. Highline (Estimated excess costs, $50 per pupil)

About 30 percent of the excess costs were thought to arise from a higher craft wage scale, extra costs for playground and crosswalk supervision, and added costs for items formerly included in teachers' jobs. Subsidies to transportation and food services accounted for about 15 percent and various planning and research activities, about 10 percent.

About 6 percent of the excess costs were ascribed to each of the following: community involvement, school use, and teachers for community desired classes; security provisions; and service to others, primarily the recreation department and administration of cooperative programs.

Negotiation costs were tagged at 3 percent of the excess.

Remedial and drop-out prevention program costs were estimated about 2 percent of the surplus costs.

Highline, as a suburban school, appears from the survey response to be similar to Bellevue in its lack of typical urban problems.

3. Spokane (Estimated excess costs, $125 per pupil)

The Spokane response broke out the estimated extraordinary expenses in the following way:

Excess salary costs	12-13%
Drop-out prevention	12-13%
Educational TV	11-12%
Remedial programs	9%
Increased counseling	8%
Food, transportation and driver's training subsidies	6-7%
Improved teaching of basic skills	6-7%
Planning	5%
Community activities	5%
Planning, research, and evaluation	3-4%
In-service training	2-3%
Providing dental service	2-3%
Security	2-3%
In-kind contributions	2-3%
Relieving effects of racial imbalance	2-3%
Aides to replace teacher functions	2-3%
Negotiations	1-2%
Old school maintenance	1-2%
Service to others	1-2%

Spokane School District provides two unusual services which they subsidize; the educational television station, and the dental clinic which operates with two paid dentists on a two-day-per-week basis.

Several elements such as the drop-out prevention, increased counseling, remedial programs, and improved teaching of basic skills are programs typical of urban school systems and are subsidized significantly from Federal funds and from earmarked state funds, which together may be 5 to 6 percent of total budget.

4. Tacoma (Estimated excess costs, $250 per pupil)

The distribution for the estimated excess costs was as follows:

Excess cost due to higher salaries	18%
Improvement of teaching of basic skills	14%
Relieving effects of racial imbalance	10%
Augmented counseling and guidance	8%
Community school program	8%
Security	3-4%
Subsidy of Department of Institutions educational needs	3-4%
Subsidy transportation, driver's training and food services	3-4%
Planning, research, and evaluation	3%
Educational TV	3%
Service to others	3%
Old school maintenance	2%
Summer school programs	2%
Remedial programs	2%
In-service training programs	1-2%
Dental clinic	1%

A substantial part of the extra costs are associated with typical urban problems; the improvement of teaching of basic skills, relieving effects of racial imbalance, augmented counseling and guidance, and increased security expenditures. Emphasis on use of the schools by the community is evident from the funding allocation. Support of a Department of Institutions facility–providing education for transient residents–is unique to Tacoma, one of the districts reporting. Tacoma makes available dental facilities, but volunteer local dentists provide the care at no cost.

Discussion

As indicated in Table 4 higher salary levels for teachers in the Seattle, Spokane, and Tacoma school districts accounted for a substantial part of the excess costs in these districts. The increases are accounted for partially by the professional maturity of the staffs (see Appendix B). The staff weighting factors for these districts are among the highest reported in the state indicating stability of staff and a high degree of professional maturity.

In addition to having a higher percentage of their teachers in the higher levels of the salary schedules, the group 1 districts have salary schedules significantly higher than those of group 4. In 1969-70, the minimum salaries for the two groups differed by only 2 percent; however, the sixth-year training level and maximum salaries were almost 10 percent higher for the group 1 averages. Undoubtedly, the competitive aspects of the higher wage and salary structure of urban areas and more aggressive negotiations have contributed to the higher salary schedules for the group 1 districts.

As a result of these factos, the more mature districts of group 1 pay a salary "penalty" of about 10 percent compared with the group 4 average; the more youthful districts from less than 2 to about 5 percent.

The effect of class size on relative per-pupil costs is negligible for Spokane and the three smaller districts because their class loading patterns are not significantly different from the group 4 averages. Seattle and Tacoma report lower student-teacher ratios which are respectively equivalent to $55 and $30 per pupil. It must be remembered, however, that in the reporting there may be considerable variation in what constitutes a "classroom teacher." A district organized in traditional fashion with self-contained classrooms may have an apparent student-teacher ratio lower than another which uses, for example, a team teaching approach supplemented by teaching specialists. Thus, it is possible that some of the net cost differentials may in actuality reduce the teacher loading on an average basis, but because of the way the statistics are accumulated, do not appear to do so.

Table 6

MISCELLANEOUS STAFF AND COST DATA–GROUP 1 DISTRICTS

	Group 4 Avg.	Group 1 Avg.	Seattle	Tacoma	Spokane	Highline	Edmonds	Bellevue
Instruction (Dollars per pupil)	$ 490	$ 587	$ 630	$ 686	$ 567	$ 538	$ 513	$ 587
(Percent)	73%	74%	77%	76%	75%	72%	74%	73%
Other (Dollars per pupil)	$ 184	$ 201	$ 192	$ 222	$ 186	$ 204	$ 183	$ 214
Total (Dollars per pupil)	$ 674	$ 787	$ 822	$ 908	$ 753	$ 743	$ 696	$ 800
Teachers (Percent of staff)	61.1%	59.5%	62.8%	56.2%	58.2%	59.4%	57.3%	57.1%
Certificated (Percent of staff)	75.3%	74.9%	73.3%	77.6%	75.2%	74.6%	73.4%	78.7%
Aides (Percent of staff)	5.5%	2.8%	2.7%	2.8%	1.1%	1.2%	6.4%	3.4%
Classified (Percent of staff)	19.2%	22.3%	24.0%	19.6%	23.6%	24.2%	20.2%	17.9%
Students/teacher	25.8	24.4	22.7	24.3	26.3	25.6	25.9	25.4
Students/certificated	20.9	19.4	19.5	17.6	20.4	20.4	20.2	18.5
Certificated/teacher	1.23	1.26	1.16	1.38	1.29	1.25	1.28	1.37

The data of Table 6 cast some light on the utilization of reresources. The following can be inferred from the data.

- Seattle apparently spends a higher percentage of its funds in the instruction account, and a larger number of its certificated staff are classified as classroom teachers.

- Bellevue appears to spend the smallest percentage of its funds in the instruction category and has the smallest fraction of its certificated personnel in the classroom teacher category. On the other hand Bellevue has the smallest fraction of staff members in the classified category and the largest fraction of total expenditures devoted to certificated personnel of any of the group 1 districts. These facts reflect the individual character of the Bellevue system which emphasizes the use of specialists, curriculum development and coordination, and greater-than-average use of counselors, rather than smaller class loadings.

- The ratio of certificated personnel to classroom teacher is higher for Tacoma and Bellevue than the other districts. In the case of Bellevue this is due, as explained above, to a programmatic decision to emphasize other program objectives rather than reduced class size. In Tacoma, the large proportion of nonteachers is undoubtedly because of the extensive number of projects, sponsored through special Federal and state grants and locally earmarked funds, that require the use of teachers in other roles than classroom teaching.

- The lower fraction of Bellevue employees in the classified category possibly reflects the lower maintenance and operating requirements of a newer plant. However, the same explanation does not suffice for Tacoma which in relative terms is an "old" system.

- The greater use of aides in the Edmonds system again reflects an individual characteristic and helps explain the high staff loading associated with this district. If two aides were treated as equivalent to one teacher, the student-teacher ratio would be reduced by one to 24.9. Similarly, the fraction of staff in the teaching category would increase if this equivalence of aides to teachers were used.

- The differences between the student-teacher and student-certificated staff ratios for groups 1 and 4 are very similar–about 20 percent–suggesting that the relative utilization of personnel is not too different for the two groups; that is, the distribution of teachers, administrators, specialists, etc., may not differ extensively between the two groups.

Table 7

FEDERAL AND SPECIAL LEVY FUNDS
(Dollars per Pupil)

	Seattle	Tacoma	Spokane	Highline	Edmonds	Bellevue
Special Levy	$ 171	$165	$137	$167	$122	$213
Federal Funds	56	70	35	28	24	13
Total	$ 227	$235	$172	$195	$146	$ 226

Based upon the survey data provided and, in some cases, upon personal interviews with school district personnel, the following general conclusions can be drawn concerning the items covered by the "net differential" of Table 4.

- In the Bellevue District, the net differential ($87) appears to apply primarily to an extended educational program along traditional (but innovative) lines. Funding for the program is largely out of special levy funds which, on a per-pupil basis, are the largest of any of the group 1 districts.(See Table 7.)

- It is probable that the net differential for the Highline District ($50) applies to a number of features unassociated with the base educational program. These include a moderately extensive community school program, some subsidy of transportation and food services, costs of security measures and service to others. The adjusted program costs for the Highline District were only 7 percent greater than the group 4 average costs.

- The net differential for the Spokane District was only $16, which does not seem enough to cover the excess expenses suggested by the survey. (It must be remembered, however, that the survey is based on *current* program whereas the statistical data used in development of Table 4 are for the 1968-69 school year. Although current urban programs are undoubtedly more extensive than those of one to two years ago, the general character will not have changed appreciably.) Thus, it may be that the base educational program costs are actually less than the corresponding costs for the group 4 districts. This possibility is supported by the fact that Spokane does not operate a kindergarten program, which is equivalent in cost to perhaps 3 percent of the total program. The Spokane survey response identified as the major items of excess costs, drop-out and prevention; remedial programs; educational television; food, transportation, and driver's training subsidies; improved teaching of basic skills; operation of a dental clinic; and various smaller items. In 1968-69 Spokane's per-pupil special levy and Federal funds were quite low.

- The net differential for the Tacoma School District was the highest for the group, amounting to $132 per pupil. A number of the items reported in the survey response related to programs for the disadvantaged and included the following: relieving the effects of racial imbalance, augmented counseling and guidance, and improving the teaching of basic skills.

The Tacoma program appears to couple a relatively strong basic educational program with a variety of elements designed to cope with problems arising from the urban scene.

Subsidy of district programs as well as work for the State Department of Institutions was also felt to represent a considerable contribution to excess costs. In a recent listing, the Tacoma School District reported over 50 special programs ranging in size from a few thousand dollars to over $600,000. Even in 1968-69, Federal funding approached $2.5 million. The combination of Federal and special levy funding was the highest per pupil of any of the six group 1 districts, although not much greater than that of Bellevue or Seattle.

Summary and Conclusions

Total per-pupil costs for the six group 1 districts were adjusted for different salary bases and for different class loadings. The adjusted values were then compared with the average total per-pupil cost for the group 4 districts, which was used as the reference base. The differences between the adjusted costs for the group 1 districts and the reference were interpreted in terms of program features obtained from a survey.

Following are the major conclusions developed in this study:

- Total cost per pupil with no analysis or interpretation is not a good means for program comparison.

- Higher salaries in the large and older school districts accounted for from 30 to 90 percent of the cost differential between these districts and the group 4 average.

- Smaller pupil-teacher ratios accounted for from 10 to 30 percent of the cost differential in two districts, but in the other four class loading was not significantly different that that of the group 4 average.

- Highline and Edmonds had net differentials which were equivalent to only 6 or 7 percent of total per-pupil costs. It is likely that these arise from a variety of causes related to size.

- Bellevue had an appreciably larger net differential as compared with the other suburban districts. This is believed to be the result of an expanded educational program supported by a relatively large special levy.

- Spokane reported a number of supplemental program elements, but had adjusted program costs close to the group 4 average. This suggests the base educational program may actually be less in real cost than the reference.

- Tacoma's net differential was the largest of the group 1 districts and seemed to be in keeping with the description of special programs in operation in the district and the level of Federal and special levy funding.

- Analysis of the data for the Seattle district disclosed that the cost differential could be explained primarily by a high salary level and low pupil-teacher ratios. The net differential was only 4 percent of total costs.

- Extraordinary costs associated with large suburban districts are probably not extensive, perhaps in the range of 5 to 10 percent. For the Seattle and Tacoma districts, which have typical "big city" problems, the additional costs may range from 15 to 20 percent.

- Large school districts have considerable resources and as a consequence have a significant advantage in a number of areas; for example, planning and research. This factor should not be overlooked since it is a feature having considerable but perhaps intangible value.

APPENDICES

Appendix A

DEFINITION OF SCHOOL DISTRICT SIZE GROUPS

	Size Group	Ave. Annual Enrollment Range	Number of Districts	Number of Buildings	Total Ave. Annual Enrollment	Average District Annual Enrollment
	1	>20,000	6	390	233,508	38,918
	2	10,000-19,999	9	208	122,809	13,645
	3	5,000-9,999	20	273	138,658	6,933
HS	4	2,600-4,999	29	237	100,920	3,480
NHS	4		1	9	3,393	3,393
Total	4		30	246	104,313	3,477
	5	1,600-2,599	25	160	53,274	2,131
HS	6	1,000-1,599	27	127	33,716	1,249
NHS	6		1	6	1,303	1,303
Total	6		28	133	35,019	1,251
HS	7	500-999	58	231	41,710	719
NHS	7		2	6	1,361	680
Total	7		60	237	43,071	718
HS	8	200-499	50	159	16,360	327
NHS	8		15	22	4,956	330
Total	8		65	181	21,316	328
HS	9	<200	26	77	3,466	133
NHS	9		58	58	3,343	58
Total	9		83	135	6,809	81
Total	HS		250	1,862	744,421	2,978
Total	NHS		77	101	14,356	186
Total	State		326	1,963	758,778	2,320

Appendix B

CLASSROOM TEACHERS' SALARIES – 1970-71 SCHOOL YEAR

In another part of the Special Levy Study,[1] it was pointed out that the average salaries of teachers -- and, in general, other employees — are high in group 1 ($9,794 per classroom teacher) and decline steadily to group 9 ($7,659 per classroom teacher). How, then, does the average salary vary from district to district in group 1, recognizing that there are significant differences among the districts? Table 1 shows in column 1 the average classroom teacher's salary for the school year 1969-70. The four entries that are starred fall into one group with an average annual salary of $10,700; the range is $266. The two unstarred entries represent significantly lower salaries and average $9,243 with a range of $316.

The salaries as listed in column 1 are not directly comparable, since they do not reflect the professional maturity of the staff. The maturity of the staff — experience and educational advancement — are considered in the state funding formula through the staff weighting factor. The staff weighting factor is inteneded to increase the district's entitlement in proportion to the professional maturity; however, it is only partially successful in doing so. The staff weighting factors listed in column 2 of Table 1 provide some insight to the character of the respective teaching staffs. They suggest that Spokane, Tacoma, and Seattle, in that order, have teachers who are more experienced and/or highly educated than those of the other three districts. Edmonds would appear to have the least experienced and/or youngest staff with Highline and Bellevue not far behind. This is not surprising, since the former districts are all associated with large cities of relatively stable population. Further, they are districts of such size as to offer multiple teaching opportunities within their bounds. This, coupled with the desirability of living in a metropolitan area, encourages teachers not to move.

In column 3 of Table 1 the teacher salaries have been adjusted by dividing the salaries of column 1 by the respective weighting factors. This tends to diminish the effect of the maturity factor and makes the figures more directly comparable. Note now that the starred values fall within an even smaller range, $85 per year, than before adjustment. The unstarred group also falls in a tighter range, $172 per year. Note also that the adjustment for staff maturity has brought the two groups closer together, but the Edmonds-Highline salary group is still significantly less than the other four.

Additional insight can be obtained from Table 2 which provides special levy information for the group 1 school districts. Here it is seen that the unstarred districts of Table 1 are disadvantaged with respect to their per-student revenue because of the lower assessed property values. One might be tempted to infer that the low tax base influences, to some extent, the salary policies of the Highline and Edmonds districts. The starting and sixth-year preparation maximum salaries from the salary schedules of these districts suggest this is not the case since they are at or above the mean for the group 1 districts. More detailed knowledge of past history and of the salary schedules is required to clarify this point.

In summary, if one adjusts the teacher salaries by use of the staff weighting factor, the average salaries for classroom teachers in the Seattle, Tacoma, Spokane, and Bellevue districts are not very different. The corresponding salaries for the Highline and Edmonds districts are significantly lower. The average salary trend is as expected – higher in the urban districts of relatively stable enrollment and lower in those experiencing recent growth and having a greater proportion of younger teachers.

---

[1] R. L. Buschbom. "Washington State Public School Teacher and Administrative Personnel Salary Schedule and Salary Trends."

Table 1

SALARY INFORMATION, 1969-70 SCHOOL YEAR

	Average Annual Salary[1] Classroom Teacher	Staff Weighting Factor	Weighted Average Annual Salary Classroom Teacher	Per-Pupil Assessed Valuation
Seattle	$10,115*	1.119	$9,039*	$14,228
Tacoma	10,064*	1.124	8,954*	7,275
Spokane	10,184*	1.136	8,965*	7,682
Highline	9,401	1.104	8,515	5,220
Edmonds	9,085	1.089	8,342	4,621
Bellevue	9,918*	1.105	8,976*	7,170
Average (All)	9,795		8,859	
Average Starred	10,070* +114 -152		8,983* +56 -29	
Average Unstarred	9,243 ± 158		8,429 ± 86	

---

[1] Total Salary

Table 2

GROUP 1 SCHOOLS–SPECIAL LEVY INFORMATION

	Mills @ 50% Assessed Valuation	Dollars per Student	Dollars per Student (Mills)
Seattle	6.58	$171	26.49
Tacoma	12.22	165	13.36
Spokane	9.30	137	14.74
Highline	17.69	167	9.47
Edmonds	14.97	122	8.23
Bellevue	15.92	213	13.43
Average	12.78	163	14.29

Appendix C

LARGE SCHOOL SURVEY

Initially it was thought desirable to survey the large schools in order to identify special programs that may have been established to meet specific needs, or because the larger districts have resources to innovate and implement special programs. A letter advising the superintendents of all districts of the intent of conducting such a survey was sent early in October, 1970. Meetings with personnel of four of the districts took place in mid-month to identify program elements associated with added costs. Following these visits a joint meeting was held with representatives from Seattle, Tacoma, Spokane, and the Special Levy Study Commission office. At this meeting it was agreed that the program elements for consideration should be couched in terms of special needs of the large school systems and the measures required to satisfy them. This approach was followed and the information sought was incorporated into a format which, after review by personnel of two districts, was finalized and mailed October 23. (A copy of this material follows.)

Completed forms from four of the districts, Bellevue, Highline, Spokane and Tacoma, trickeled in during the period November 6 through December 16. The results were compiled and uncertainties clarified by follow-up telephone calls. The estimated extraordinary cost totals were as follows:

	Bellevue	Highline	Spokane	Tacoma
		(Dollars per Pupil)		
Extraordinary Costs (Current)	$ 90	$50	$125	$250
Gross Differential (1968-69)	127	70	80	235

Considering the subjective judgments required for many of the responses, some redundancies in a few of the program elements listed in the form, and the lack of a normalized reference base, these estimates are not at all bad.

The value of the survey is primarily to pinpoint program elements peculiar to a particular school district rather than to unearth detailed cost information. The results are discussed in the body of the report.

October 23, 1970

Superintendent
School District No.
, Washington

Dear :

This communication is a follow-up on my letter of October 6, 1970, and ensuing discussions with you and your staff.

The attached form is a listing of elements which may be unique to large school districts—particularly urban districts. These elements may result in additional costs in comparison with smaller urban, suburban, or rural districts. We would appreciate your providing the cost estimate information needed to complete columns 3 and 4. If possible, we would like to have your response by November 4.

To achieve uniformity of response, a guidance sheet for completion of the form is provided. If you have any question or find the timing impossible, please call me collect on 509-946-2650, Richland, Washington.

For your information, this form was based upon (1) initial identification of possible added costs by discussions with personnel of four of the districts involved, (2) review and establishment of a format with representatives of three districts and personnel of the Commission, and (3) review in the near-final format by personnel of two districts. We hope, by reason of the evolutionary process through which this form was prepared, that it will be manageable for you and at the same time provide information useful to the Temporary Special Levy Study Commission. Bellevue, Edmonds, Highline, Seattle, Spokane and Tacoma constitute the school districts being surveyed.

Thank you in advance for your continued interest and participation.

Very truly yours,

E. E. Voiland

EEV:slm
Encls.

GUIDANCE FOR COMPLETION OF FORM

1. Please remember that the purpose of this exercise is to identify only extraordinary or additional costs which a School District such as yours may have to incur because of size and urban character. This list is intended as a check list. Many items may not be applicable; where they are not, please line them out. Add any items that are appropriate. These may be simply identified by number, using the roman numeral, arabic numeral, and letter designation as appropriate.

2. Added costs in dollars per student (column 3) should be based on the number of full-time equivalent students in the K-12 program. Kindergarten children should be counted as 0.5 FTE, if they attend school only half a day. Special education students should not be included.

3. The estimates in column 3 need not cover each individual item listed in column 2; they should, however, apply to each item listed in column 1. However, the more detailed the information the more useful. Perhaps a compromise would be to break out the most significant items of column 2 and lump the remainder under "Other."

4. It is recognized that some cost elements can be estimated quite precisely, *e.g.*, a transportation subsidy, whereas others can be estimated only roughly. In some instances a subjective "guesstimate" is the best that can be provided. It would be helpful if entries in the third column were labeled with A, B, or C; A would represent the firmest estimate and C a "top-of-the-head" estimate.

5. In compiling cost information by summing a number of parts, there is a tendency to overestimate. Please review the total incremental cost estimate in terms of the total budget or other appropriate cost element to see if it is reasonable.

EXTRAORDINARY COST ITEMS–LARGE (URBAN) SCHOOL DISTRICTS

I. Administration

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Increased communication. (The size, increased involvement of students, parents and teachers in school activities, and the higher concentration of vocal political elements result in the need for more and better communication.	a. Develop and maintain expanded communication channels among the various elements of the school system; administration, teachers, students and community. b. Provide a public relations or community relations effort.		
2. Obtaining and utilizing auxiliary funding for the school district. (The increasing allocation of Federal funds has been beneficial in providing supplementary and complementary educational and pupil service programs, but has increased the burden of administrative detail and cost on school districts.)	a. Undertake program and service analyses to justify receipt of Federal educational funds. b. Underwrite all or part of administrative costs not included in grants. c. Provide working capital (cash) to "float" programs funded on an irregular fiscal cycle. d. Accept warrant interest expense because of irregular fiscal cycle of special programs.		
3. Greater accountability for regular and special programs.	Provide: a. Planning programs. b. Research and evaluation programs. c. Electronic Data Processing Systems.		

4. Relieving racial imbalance.	Establish a mechanism for achieving racial balance including: a. Program changes. b. Transportation. c. Personnel. d. Communications program. e. Bringing services to pupils who are distributed in a number of locations.
5. Negotiations with teacher associations.	a. Maintain full- or part-time negotiation personnel. b. Conduct time (and money) consuming negotiations. c. Provide additional communications.
6. Provide for excess costs (due to improper weighting factors) associated with disproportionately large number of teachers in higher pay brackets. (Ability to move within the district and greater availability of experiences and positions results in a large number of teachers remaining in large school districts.)	Provide funding out of local funds (special levy) or divert from general fund.
7. Continuing construction and remodeling and land acquisition.	a. Provide staff to plan school buildings and land use. b. Underwrite increased costs of state school land lease because of higher urban land values.
8. Response to questionnaires, surveys, studies, etc., from Federal, state and private agencies. (Big districts are targets for many requests.)	Underwrite costs from general fund.

II. Instruction–Students

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Improvement of teaching of basic skills. (Many urban students lag in reading and mathematics.)	Provide more effective teachers, methods, and materials.		
2. Decreasing the number of sub-educated graduates. (Many urban high school graduates read at 7th- or 8th-grade level.)	Provide remedial programs at all levels.		
3. Decreasing the dropout incidence.	Provide: a. Predropout identification programs. b. Improved counseling and guidance. c. Reentry programs. d. Continued education.		
4. Response to needs of special student groups within the school system.	Provide: a. Head Start and Follow-Through type of programs. b. Advanced (college placement) courses. c. Gifted student programs. d. Programs for pregnant girls.		
5. Summer programs. (The concentration of students in the city, frequent lack of activities and work opportunity impose greater demands on the schools.)	Provide: a. Academic programs. b. Enrichment programs. c. Work study programs. d. Outdoor programs.		

6. Increased emphasis on career opportunity programs, as compared to college preparatory courses. (There is an increasing concern with the inappropriateness of current curriculum for the large fraction of urban students who are occupationally oriented.)	Provide: a. Vocational guidance and counseling. b. Relevant vocational education. c. Work-study programs.		
7. Increased demand for improved programs. (Generally the larger the community, the greater demand for improved programs.)	a. Provide increased curriculum planning capability. b. Implementation of expanded programs.		

III. Instruction—Teachers

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Participation in certification of teachers and other school personnel.	a. Provide personnel to serve on certification committees. b. Provide supervision for intern programs. (This activity will expand with adoption of the "Fourth Draft" certification plan.)		
2. Requirement of teachers to cope with different and more complex programs.	a. Provide in-service training programs for new programs which needs demand. b. Provide cultural sensitization to needs of minority groups.		
3. Decreased "volunteer" activity on the part of teachers.	a. Reimburse teachers. b. Provide other personnel--aides, parents, etc.		

IV. Pupil Services

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Broad spectrum of food services. (Special food programs may not be full-cost recovery, hence must be supported from the general fund, a diversion of educational funds to services which are not educational, but are of great importance in enabling some children to learn.)	a. Subsidize free lunch programs.		
	b. Subsidize breakfast programs.		
	c. Underwrite associated peripheral costs--custodial, utilities, etc.		
2. Transportation	a. Subsidize contracted services from general fund.		
	b. Underwrite cost/subsidy of field trip transportation.		
	c. Compensate for high pay scale for drivers.		
	d. Subsidize standby costs on field trips, etc.		
3. Bringing services to the student since frequently he will not avail himself of services provided by other agencies.	a. Provide facilities for dental work in school.		
	b. Provide light clinic facilities.		
	c. Coordinate supportive dental or welfare service.		

4. Augmented counseling and guidance. (Many urban students are not familiar with requirements of certain types of work; also, because of background and limited experience many require more service of this type.)	Provide: a. Increased level of vocational counseling. b. Increased level of general counseling. c. Home-school liaison. d. Diagnostic testing and psychological testing. e. Drug abuse programs.
5. Auxiliary learning opportunity.	a. Educational TV station.
6. Drivers training.	a. Provide subsidy for inadequate state reimbursement. b. Lease driver training cars. c. Acquire simulators. d. Provide driver training range.

V. Community

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Increased participation of community people in school operation and activities.	a. Provide enhanced community involvement programs.		
	b. Provide coordination of community groups.		
	c. Provide input to community committees, advisory groups, etc.		
2. Making schools available to youth and community groups on an expanded basis without cost. (Community schools.)	a. Underwrite operational costs.		
	b. Provide coordination for community schools.		
	c. Provide teachers for desired classes.		

VI. Maintenance and Operation

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Higher maintenance and operating costs. (Many cities have half their schools over 50 years old. The nature of old schools may restrict innovation in educational program.)	a. Provide extra funds for M&O costs of old schools.		
	b. Provide for extra costs due to jurisdictional agreements with unions.		
	c. Provide for generally higher wage structure in large cities.		

2. Higher incidence of crime and vandalism.	a. Provide increased security measures of a mechanical nature (both alarm or surveillance systems and patrol equipment). b. Provide security personnel. c. Provide maintenance funds for vandalism. d. Subsidize insurance or increase self-insurance fund. e. Integrate with other law enforcement agencies. f. Compensate for increased construction.
3. Augmented safety requirements	a. Crosswalk supervisor. b. Playground supervision.
4. Pollution abatement	a. Provide certified incinerators. b. Replace coal fired boiler units.
5. Stricter building and zoning codes than non-urban. (Also, the large district may have to deal with several different agencies.)	Conform in the following areas: a. Building. b. Electrical - underground wiring. c. Plumbing - drainage. d. Fire protection. e. Parking, fencing, green belt. f. LID's.
6. Greater potential for litigation.	a. Improved planning to avoid litigation —legal aid. b. Underwrite legal costs in litigation.

VII. Services to Others

Demands on Urban System	Means of Satisfying Demand	Added Costs Dollars per Student	Cost Distribution Local/State/Other
1. Operation of multidistrict special education programs.	a. Provide space and facilities. b. Provide operational and maintenance costs on housing. c. Subsidize costs of participating districts if state reimbursement is less than budgeted amounts.		
2. Services to other governmental or community agencies.	a. Provide subsidy in support of Department of Institution programs. b. Provide support for predelinquent boys or girls domiciled in Good Shepherd type homes. c. Administer National Youth Corps program. d. Cooperate in local recreation programs.		
3. Participation in cooperative (research) programs with universities or other agencies.	a. Provide subsidy in the form of diverted manpower for liaison. b. Provide space and facilities. c. Provide personnel. d. Provide administrative service.		
4. Service for smaller neighboring districts.	a. Make curriculum experts available. b. Provide in-service training opportunity.		

IMPRESSIONS GATHERED FROM

VISITING SMALL SCHOOLS

IMPRESSIONS GATHERED FROM VISITING SMALL SCHOOLS

Introduction

A stated goal of public education is to provide each attendee of our schools the opportunity of satisfying his educational potential to the limit of his abilities. As the world becomes more complex, meeting this goal becomes a greater and greater challenge. The demands of ever-expanding technology, the needs of a changing and more complex society, and even the abrogation of parental responsibilities in some areas, has resulted in an increase in the scope and detail of educational services which the common schools must provide. The concept of the "comprehensive" school is a current ideal–perhaps one more often pursued than attained. The comprehensive school can be thought of as one whose graduates have had the opportunity for an education that will permit them to exercise any option for continued education or personal development. Thus the comprehensive school should offer a wide variety of courses and other educational experiences in academic and occupational fields and in the cognitive and affective domains.

Comprehensiveness is often equated with size because it is easier to provide the variety of courses, facilities, programs and teachers associated with comprehensiveness in a large than in a small school. Comprehensiveness–and size–has also become, for many, synonymous with excellence. (Perhaps this is due to our mode of school accreditation, which is primarily statistical; or to the fact that measuring or detailing quantity of staff, facilities, and courses–as opposed to quality–is a relatively easy thing to do.) It is apparent, however, that some large schools with many resources are not very good, whereas some quite small schools have very fine reputations. Obviously size is not the whole story, and even it if were, there are many children–the "geographically disadvantaged"–who have little alternative but to attend schools that are relatively small, and who in justice, must have their educational needs satisfied to as great a degree as possible.

In the analysis of small school statistical data, the desirability of obtaining some background information on small school districts manifested itself; hence, this study was undertaken.

The purpose of the study was to establish some understanding of how several relatively small school districts approach the task of education and to develop if possible, impressions, conclusions, and recommendations pertaining to school size, educational opportunity, and cost. It must be emphasized that this was not a penetrating study to provide detailed, specific information, and conclusions, but rather, broad general understanding.

General Approach

Originally six school districts, including three nonhigh school districts, were selected. Because of the generally greater concern for education at the high school level, two more high school districts were added. The schools were chosen to provide a range of per-student costs and assessed valuation per student; however, it is obvious that the small sample has little statistical significance.

A letter outlining the general purpose of the study was mailed to the district superintendents; and at a later date, an interview appointment was arranged by telephone. This interview was conducted using a prepared checklist (see Table 1). In general, the superintendent was the principal contact, although in several instances the opportunity to talk to other administrators and teachers existed. In one instance where the superintendent was new, his secretary was invited to the conference and was very helpful. The interviews generally lasted about half a day in those districts having high schools and somewhat less in the nonhigh school districts. Some of the schools were toured rather completely. All interviews were undertaken by the same interviewer. Reception in all of the schools visited was excellent; the interviewees were seemingly outspoken and candid in their comments.

The information derived in the interviews was tabulated in a matrix so that ready comparisons could be made, and from this the information in Section 3 (below) was derived. Follow-up telephone calls were made to clear up dubious points and fill in data which were overlooked in the interview.

It should be emphasized that the information is essentially as provided by the interviewees and inferred from observation. It was beyond the scope of this study to evaluate–other than subjectively–school program elements discussed. For example, the relative quality of course offerings or the impact of multiple teacher preparation on the quality of education is obviously beyond the scope of this study.

For reporting purposes, the high school and nonhigh school districts are treated separately.

High School Districts

In considering the plight of the small schools, there is generally more emphasis and concern placed on the secondary program than on the elementary program. This results from the fact that the elementary schools–as in the time of Horace Mann–still devote much time and effort to the teaching of skills. As a consequence, the scope of the elementary schools has expanded to a lesser extent that that of the high schools which now cover work formerly undertaken at the university level and have broadened their curricula extensively in nonacademic areas. Also, elementary schools are generally operated with self-contained classrooms, whereas the departmentalized secondary schools use teachers with specialized training and require a broader enrollment base for efficient operation.

Summary of Interview Data

The following information is summarized from the data obtained in the personal interviews.

1. School Management

The Superintendent in District A is new both to the district and to the state. He is troubled by the inadequacy of information on file concerning his school and students. The administration/board responsibilities are not clearly defined, and a tradition has been for the community to deal with the school system through the board rather than through the administrator. The situation is not helped by the presence as a paid employee of the board of an individual who–prior to recent state legislation–had served as secretary to the board for 20 years.

The Superintendent of District B is an interim appointee, having come out of semiretirement to administer the district until a permanent man can be hired. (This situation arose as a result of a special levy vote failure and the belief that the high school operations would be transferred elsewhere. This conjecture–which, of course, did not materialize–resulted in the departure not only of the former superintendent but also of several staff members.) Despite the loss of the special levy–which was very high–relationships between administration, board and community appear to be good.

The Superintendent of District C is a long-time incumbent. He is also a native of the area and taught in the district for a number of years. Interestingly enough two of the board members were his students at one time. The superintendent gives the impression of being a "careful" financial manager and is not averse to personally doing minor maintenance in the summertime. His educational philosophy is reflected in the statement, "If you can be a B student don't be a C!"

The Superintendent of District D is also a long-term incumbent. He appears to be the most innovative of the superintendents interviewed and perhaps the most "democratic" in terms of staff and student relationships. Perhaps this reflects his relationship with his board which he termed the "world's best." The board is apparently quite educationally oriented and most, if not all, members are college graduates. The superintendent of District D admits to a continuing effort to build and maintain community support.

The Superintendent of District E is also a long-term incumbent and enjoys the confidence of the people and board. The local tradition is for passive participation of the board in the educational planning and the superintendent keenly feels the responsibility of defining the kind of program that will meet the needs and desires of the community. On the other hand, once financing requirements are agreed upon, the board assumes responsibility for raising the (special levy) funds. From samples of letters and questionnaires, it appears that the district communicates with its patrons with a good deal of candor on such items as financial matters and construction programs.

2. Organization

The schools visited are organized along traditional lines. The high schools generally have 7-period days of 45-50 minutes. Students are usually scheduled for five subjects with a study hall, library period, laboratory period, or physical education class. All schools have a closed campus. In general–with exception of art and music–there are no ungraded classes.

In Districts C, D, and E the 6-7-8 or 7-8 grades are departmentalized, with teachers moving from class to class.

Table 1

GUIDE FOR
SMALL SCHOOL INTERVIEWS

INSTRUCTIONAL

- Courses Offered
- Class Size
- Vocational
  - Agricultural
  - Business
  - Industrial Arts
  - Home Economics
  - Other
- Social Studies
- Fine Arts
- Humanities
- Foreign Language
- Science/Mathematics
- Laboratory Facilities
- Library
  - Bookmobile
- Innovation
  - Learning Packages
  - IPI
  - Ungraded
  - Flexible Scheduling
  - Other
- Educational TV
- Field Trips
- Visiting Professionals
- Remedial
- Handicapped

EXTRACURRICULAR

- Newspaper
- Annual
- Athletics
- 4-H
- Other

TEACHERS

- Number
  - Classroom
  - Library
  - Other
- Turnover
- Quality
- Qualification - re assignment
- Preparations
- Teacher Training
  - In-Service
  - Summer School
  - Sabbatical
- Aides

COMMUNITY

- Impact of
- Help from
- Communications

OUTSIDE ASSISTANCE

- College/University
- Community College
- Intermediate District
- Neighboring District
- Other

FATE OF GRADUATES

- Four-Year College
- Community College
- Voc-Tec
- Work
- Other

PUPIL SERVICES

- Health Services
- Food Services
- Transportation
- Testing
- Guidance/Counseling

MISCELLANEOUS

- Equipment Maintenance

3. Teachers

In District A, teachers were thought to be average for small schools, but would rank below the average for larger schools. In District C, special effort is made to encourage young teachers to "develop confidence" in their teaching ability. The administration in District E replaced six teachers this year. For the first time they were able to acquire a woman physical education teacher. Other acquisitions were believed exceptional and the staff is thought to be the strongest in the history of the school.

4. Teacher Assignment

In Districts C, D, and E, essentially all teachers are assigned in their field of training. This is not possible in Districts A and B. Class preparations are inversely related to size. In the three larger of the five schools the maximum number of subject areas is two; however, there may be several preparations in a single subject area.

5. Teacher Training

None of the schools conducts elaborate in-service training programs. If available, in-service programs provided by larger neighboring districts are used. District D encourages its teachers to visit other schools and observe what new is going on. District E is using the services of a textbook company for a three-session in-service mathematics course. They are also providing a workshop on drug abuse. None of these schools has provision for sabbatical leaves.

6. Teacher Turnover

Turnover last year in District A was three out of seven teachers and the superintendent. Turnover has tended to be high in this district. In the other districts, turnover has been historically low. Last year was an exception, however, for Districts B, C, and E when a levy failure, an unusual number of retirements, and an unusual number of departures, respectively, occurred. In Districts C, D, and E, normal teacher turnover does not exceed two per year on the average.

7. Teacher Aides

Teacher aides are not used extensively in the five districts visited. The most prevalent use is in the library.

8. Librarian

The availability of a professional librarian increases with the size of the school. District A utilizes a teacher and students on a part-time basis. District B has a library aide and a professional librarian visits periodically from the intermediate school district. The three larger schools have librarians who are assigned to the library from half to full time. The librarian in District E is a former teacher whom the district encouraged to become certified in librarianship.

9. Counseling/Guidance Services

In the smaller of the districts, counseling and guidance are provided by the principal or superintendent. In the larger schools responsibility is assigned to professional counselors. In District E counseling is a full-time activity for one staff member.

10. Student Testing

All districts administer standardized achievement tests to the elementary students on a once- or-twice-a-year basis. High school students also are administered the Washington precollege admittance test. In some districts the National Merit Scholarship examinations are also available. Although detailed information on performance on these tests was not obtained, statements such as "averages were near the state median," "above national average," and "some National Merit tests were above the 94 percentile"suggest no great deficiencies in basic preparation.

Special psychological testing services are procured either from the intermediate school district or from special education cooperative programs.

11. Curriculum

The course offerings in the five high school departments are shown in Table 2. In general, the courses in the larger schools C, D, and E are more formalized and are offered on a routine, periodic basis. In the

Table 2

COURSE OFFERINGS (1)

	District				
	A	B	C	D	E
LANGUAGE ARTS					
English I, II, III, IV	X	X	X	X	X
Advanced Literature				X	
Speech		X		X	X
Drama		X		X	X
Journalism	X	X	X	X	X
FOREIGN LANGUAGE					
French			X	X	
German		X			
Latin				X	
Spanish	X (2)				X
Mathematics					
General Math		X	X	X	X
Algebra I, II	X	X	X	X	X
Geometry	X	X	X	X	X
Trigonometry		X	X	X	X
Math Analysis	X (2)	X	X	X	X
Science					
General Science			X		
Physical Science				X	X
Earth Science			X		
Biology	X	X	X	X	X
Chemistry	X	X	X	X	X
Physics	X	X	X	X	X
Social Studies					
Economics	X		X	X	X
Consumer Economics					X
Geography			X	X	
Government		X			
American History		X			
U. S. History	X	X	X	X	X
Washington History	X	X	X	X	X
World History		X	X	X	X
Psychology		X		X	X
Sociology	X	X		X	X
Contemporary World Problems		X	X	X	X

Table 2–Continued

COURSE OFFERINGS

	District A	B	C	D	E
ART		X		X	X
MUSIC					
Band	(3)		X	X	X
Choral	(3)	X	X	X	X
Music	X	X	X	X	X
AGRICULTURAL EDUCATION				X(4)	(5)
BUSINESS EDUCATION					
General Business	X	X		X	
Bookkeeping	X	X	X	X	X
Office Machines	X	X(6)	X	X	
Shorthand	X	X	X	X	X
Typing	X	X	X	X	X
HOME ECONOMICS	X	X	X	X(7)	X(7)
INDUSTRIAL ARTS					
Arts and Crafts	X			X	X
Mechanical Drawing		(6)		X	X
Shop		X	X	X	X
Electricity	X				
GUIDANCE/COUNSELLING	(8)	(8)	X	X	X
LIBRARY SCIENCE					X(9)
PHYSICAL EDUCATION/HEALTH	X	X	X	X	X
DRIVER TRAINING		X	X	X	X

(1) Courses offered over a two-year period.
(2) Individualized program utilizing a "teaching machine".
(3) Elementary school only.
(4) Includes girls' program.
(5) At neighboring district.
(6) At neighboring district.
(7) Includes boys' program.
(8) By administrators or teachers.
(9) For college-bound students, primarily.

smaller districts, some of the courses, particularly in mathematics, may be on a highly individualized basis wherein the student is heavily reliant on teaching aids and works under the direct tutelage of the teacher. The table of course offerings indicates only the fact that the various courses of study are provided. Acquisition of information pertaining to the depth of the courses or their quality was beyond the scope of this study.

The fact that teachers in the larger districts, C, D, and E, were almost without exception assigned to the areas of their training and had fewer class preparations suggests the potential for an over-all higher quality program in these districts. It is probable that the success of the educational program in the smaller schools–such as A or B–depends heavily upon the science teacher who normally also handles mathematics. In District B, for example, there was a great delight expressed in the (new) science/math teacher who was apparently unusually well-qualified to teach in these areas. It was strongly implied that in the past small schools have had a hard time competing with larger schools for good science/math teachers.

The course offerings do not include a plethora of electives. On the other hand, the offerings in mathematics are surprisingly good. Similarly, the spectrum provided in the social studies area appears to provide reasonable variety.

Perhaps the most noteworthy deficiencies in all the schools visited are in the areas of foreign languages, fine arts, and industrial arts/shop courses.

12. Innovation

Only one of the five districts appeared to have a deliberate policy of "trying new things." District D was using 15 to 20 students as teachers' aides, was studying the trimester system, and had acquired a videotape unit which was being used by teachers for self-evaluation. District A had been the recipient of some audio-visual "teaching machines" and a number of self-teaching instructional units (Title III project). With the exception of Spanish and shorthand, these were not being extensively used. The nonuse of these resources is apparently the result of a lack of commitment of teachers and lack of coordination by former administration. Other areas of self-teaching courses are electricity, physical science, advanced mathematics, and arc welding. District A does have portable units which students may take home. District E provides learning packages for students who cannot attend classes because of extended illness or hospitalization, and for transfer students who need a required course which is not offered because it is the "off" year. Special advanced courses are also made possible through learning packages.

13. Remedial Programs

Districts C and E provide one-fourth- to one-half-time remedial reading or reading improvement programs. The programs are primarily for students in Grades 1-6, but others are accommodated according to need. District A uses SRA materials as a supplement for those having difficulty. Districts B and D use summer programs to accomplish remedial education.

14. Summer Programs

Only two of the visited districts provide summer programs. District B provides a three-week remedial reading session. District D provides a 20-day course in remedial reading and mathematics, which was participated in last year by 31 youngsters. The average improvement was 0.55 grade levels in reading and 0.86 in mathematics. Students in District E have access to the summer school program in a neighboring district and in the past some have participated.

Enrichment programs are not offered in summer sessions; however, because of the large number of students who work on family farms, there may be little demand in the agricultural districts.

15. Handicapped and Special Education

All districts have itinerant speech therapy service. Four districts subscribe to special education cooperatives and seemed well satisfied with the services. District A has only one marginal special education student at the present time and the parents prefer him to be in regular classes. District D accommodates six slow learners as part of the regular program. These students participate in both regular and special classes, and in the opinion of the superintendent, would be dropouts in many districts.

16. Supplies and Materials

In four districts, it was felt that educational supplies were adequate. In the brief tours of facilities that were made, fairly standard audio-visual equipment, overhead projection and duplicating equipment were observed. Two of the superintendents stated that they would–and could–purchase any supplies or equipment that their teachers would use. Services such as the King County purchasing service were used, and in the larger of the visited districts a bid system was in operation.

A teacher in District E stated that it was much easier and faster to get special supplies in her current post than in a larger district (enrollment exceeding 5,000) where she had previously worked. This might not be true in a small school with less access to a larger city.

In only one district were supply problems evident. Apparently supplies purchased for a two-year period were running out and the available funds were inadequate to resupply.

17. Library Resources

Included in library resources are books, paperbacks, magazines, and audio-visual supplies. Most of the districts felt that their libraries were adequate. Two, A and B, were recipients of Federal funds which were used to build up library resources. One district has a particularly good selection of audio-visual tapes. The other four either subscribe to film cooperatives or participate in audio-visual loan programs operated by the intermediate school district. Two districts have access to bookmobiles and believe them an excellent supplement to their own resources. A third district would like to have access to a bookmobile, but the service is not available. A fourth district has access to a town library which cooperates in arranging interlibrary loans, etc.

18. Food Services

In all except one district a hot lunch program was provided. In District B most children go home for lunch; but a limited selection of convenience foods is made available for those who cannot.

19. Transportation

In Districts A, C, D, and E extensive transportation of students occurs, ranging from 80 to 95 percent of the students. In District A there was concern about condition of the buses and the fact that no reserve for purchase of new buses had been established. In District E, the presence of heavy trucking, railroad crossings, and lack of sidewalks has fostered a bussing policy which requires local annual subsidy of between $20 and $30 per student.

20. Educational Television

Three districts do not use educational TV except on special occasions. In one instance an attempt had been made but the difficulty of scheduling was a barrier. District C has TV hook-ups in each room and the available educational channel is used on a somewhat routine basis. District A also makes use of available educational TV.

21. Field Trips

With exception of District A, extensive use of field trips is made. This appears to be particularly attractive to school districts of this size as 1) they have buses available, and 2) all of one or two classes can be accommodated at a time. Districts B, C, D, and E are located relatively close to natural, historical, and industrial areas so a variety of experiences is reasonably available without extensive travel. District A is less favorably situated.

22. Visiting Professionals

Only Districts D and E regularly schedule special cultural enrichment or educational speakers or groups. Typical program include concerts or dramatic presentations by university and college groups and special topic speakers, such as a prison speaker talking about crime or drug abuse. Several of the schools formerly subscribed to the National School Assembly Program, but a deterioration in program quality resulted in their withdrawals.

23. Extracurricular Activities

All of the schools have a school newspaper and annual; the degree of sophistication depends primarily on the size of the school. The newspaper is generally published by a journalism (or English) class, and the annual by a separate staff.

Athletics play an important part of both the school and community life. There is large participation in both intramural and extramural programs. The larger districts have increasingly active programs for girls.

4-H activities are very popular in Districts A, C, and D, the truly agricultural regions. In Districts A and D the school is not directly involved, but participation of the student body is respectively 50 and 25 percent. In District C, a school aide is heavily involved in 4-H, and as many as 75 percent of the students may be participating. In District E perhaps 10 percent participation occurs. Programs include home appliance repair, dairying, sewing, rabbit clubs, horse clubs, and cattle clubs.

District C is involved with the International Foreign Student Exchange program. District D has a student exchange program wherein periodically six students exchange places for two days with students of one of several other schools in a multicounty region. Some of the schools have scheduled meetings between principals and student groups in the interest of better school operation.

It appears that there is a variety of student involvement activities which reflect to a certain extent the type of community and the interests that prevail. The extent of participation is high, ranging in estimates from 75 percent to 100 percent. In one district an actual count disclosed 92 percent of the student body involved in some type of extracurricular activity.

24. Fate of Graduates

The following estimates pertaining to four-year college performance apply to graduating seniors from the respective high schools:

District	Start	Finish
A	50 %	?
B	51	32 %
C	?	30
D	50	25
E	25	10-15

Estimates of attendance at community colleges ranged from 25 to 50 percent for Districts C, D, and E. Residents of four of the five schools had Washington community colleges within relatively easy commuting distance and some had several alternatives. Some community college attendees are transfer students; however, the majority are believed to be enrolled in occupational education programs. Some of the girls go directly to business schools or beauty culture schools. Relatively few of the graduating boys are believed to enter the work force directly; more possibly enter the Armed Forces.

Impressions and Conclusions

From consideration of the interview information the following impressions and conclusions have been developed. In some instances specific recommendations are also included. It should be noted that some of the items are broad in scope and capable of being arrived at apart from the interviews. Other items are quite specific and directly relate to the schools visited – although by extension they may relate to other small schools.

1. Course Offerings

It is literally impossible for a small high school (less than 200 enrollment) to offer as formal courses a selection equivalent to that offered by schools 2 to 10 times their size. On the other hand, this lack of opportunity must be considered only one of the many factors that pertain – not to the school's ideal performance, but–to its real performance in meeting the needs of students.

2. School Management

The management of a small school district is very demanding in terms of both personal expertise and leadership.

In larger school districts staff specialists provide expertise in particular areas. Like the president of a small company, the superintendent of a small district must be good in a number of areas – education, staffing, finance, public relations, change – if the district is to prosper. The influence of the superintendent on the whole tenor of the district operation is probably the single largest factor.

3. School Organization

Organization in the small schools appears to be little different than it was 50 or 75 years ago; this is primarily a result of the traditional autonomy of the local school district. Some of the cooperative programs – which are primarily concerned with special education or peripheral services – suggest that similar approaches might be applicable to more traditional courses. At least one of the visited schools was in the planning stage for sharing music and art teachers with two neighboring districts. One is tempted to ask if there is any reason why this concept could not be extended to science, mathematics, or social studies.

One of the problems in diffusely populated areas is the difficulty of bringing students to the teacher. With improved roads and other communications media it may be more practical to bring the teacher to the students. One suspects that to be effective this would require a complete reexamination of 1) interdistrict relationships, and 2) reorganization of classroom teaching schedules – both highly traditional elements of the school system.

4. Financial Inflexibility

Small schools may, because of their size, be unable to withstand the shock of even a moderate financial outlay which has not been planned for. Even the overhaul of a bus can be a problem for the very small district. It is not clear whether there are adequate emergency or special funding alternatives available to cover such emergency situations.

5. District Homogeneity

Small schools generally serve homogeneous communities. This is both an advantage and a disadvantage. It is an advantage because community goals tend to be simpler, community traditions more understandable, and community power structure more discernible. Relevancy of the school to the students is undoubtedly easier to accomplish than in a school of heterogeneous socioeconomic, racial, or ethnic character. It is disadvantageous because the community may reflect only a few of the many facets of American society. There is not the natural learning experience arising from a daily association with other racial or ethnic groups or with those at the extremes of the socioeconomic scale. Also, because of the generally more conservative nature of rural communities, formal recognition of narrowness in societal education may not occur. Yet most of the small school graduates do encounter the "broader" society at two- and four-year colleges and ultimately in pursuing a career in the urban scene. The small schools are probably not dealing with this problem very well – nor are many of the larger schools. Some small schools, however, may not even recognize this as a problem.

6. Teacher Quality

The over-all quality of the teacher, as in all schools, is the single greatest influence *within* the school system on the students' attitude toward learning. In the past, the small schools, because of remoteness, less desirable environs, less compatibility with the local populace, more class preparations, and heavier work loads have been less attractive to teachers. This situation was abetted by the chronic shortage of teachers which existed until the current year (1970-71). With the current teacher surplus and from the experience of two of the visited schools, there is reason to believe that the "poor cousin" position of the smaller schools is changing and that a better all-around teacher selection will be available.

7. Holding Power for Teachers

Whether or not small schools can hold good teachers they recruit is a question in point. If the school is large enough (approximately 8-10 high school teachers) so that the teachers are all teaching in their field of training, and the onus of multiple preparation is therefore reduced, there is a good chance that a reasonably stable staff can be maintained. At least this appeared to be the case in the schools visited. It should be mentioned, however, that the schools visited were not far from larger communities; if they were more remote, the holding power might be less. It remains to be proved whether or not the current teacher surplus will affect turnover in the smaller more remote rural schools.

(A comment from the Superintendent of School A suggests that the dissatisfaction of spouses, particularly for men teachers, may be a big factor in the migration of teachers from schools in remote areas. He said, "You know, this is a hard country on wives," and went on to comment briefly on the difficulty of finding acceptance in a close-knit community with its parochial interests and society.)

8. Supplemental Resources

It is apparent that there are a variety of resources either available or becoming available to assist the small schools in their task of providing good education.

- Cooperatives exist wherein one district – usually a large one – manages and operates the service to which the member schools subscribe. The areas encountered include special education for the handicapped, and audio-visual or film cooperatives.
- Mobile libraries – bookmobiles – both supplement library holdings and provide library services not otherwise available.
- Intermediate school districts (ISD) provide a variety of services including speech therapists, audiologists, audiovisual services, assistance on finance, and special reading instructors. The services vary from ISD to ISD depending on 1) the service "vacuums" that exist, 2) the interest and area of expertise of the ISD management, and 3) the strength and interest of the ISD advisory council. In some areas, where services from cooperatives and other established institutions are good, the services the ISD provides, and even the role of the ISD, were unclear. In another area the service provided by the ISD was well received. In still another, there was a desire to assess the specific needs of the local districts served and thus provide a guide to the ISD as to what direction it might tend. It appears that the ISD's should be able to provide a variety of useful complementary services; however, in this early stage of their development it is not clear that they are addressing themselves to the real needs of their constituents.
- Educational TV is available and has been available for a number of years. Many small districts have or could have access to it. Where used in the visited districts, it appears to be on a haphazard basis. Educational TV does not appear to reflect any input from its users. Considering the power of the medium, it appears to have disappointingly small impact on the formal educational process. It is possible that certain general needs of the small districts in a particular region could be satisfied through the use of Educational TV if proper coordination were taking place.

A systematic cataloguing of resources available to small school districts together with pertinent information on what they can do and what steps to follow in their use would be desirable in order to assess the over-all worth of these educational adjuncts.

9. Student Involvement in School Programs

A significant feature of small schools is the extensive involvement of students in school activities. This occurs partly because competitive nonschool activities are largely nonexistent in most of the smaller communities and partly because the small sizes of the schools provide more opportunities for people to join and participate. Active participants probably include at least 75 percent of the student body as a minimum and may approach the entire student body. There is no doubt that active participation fosters identity of the individual student with the school, and identity encourages commitment. One intuitively judges participation in school affairs as a positive value in the educational process, but to quantify it as a positive force is difficult is not impossible. (It is significant that apathy and diffidence in large, and particularly urban, school districts is a source of concern at the present time and considerable effort is being made to encourage engagement in school activities as a positive motivating influence.) In at least one district the students were consulted routinely on school policy and operation.

10. Field Trips

Field trips are popular in small schools. In addition to being popular, they are relatively easy to accomplish since most small schools have their own buses and an entire class or two can be readily accommodated at one time. The field trip can be a valuable adjunct to the normal educational process; however, it is not clear what objectives are generally attached to field trips. It is probable that emphasis is placed on things–"the milk comes in here–the butter comes out there–here is your ice cream bar"–rather than on people and what they do and how important it is what they do. Field trips could be very useful as springboards to career planning, job qualifications, etc. It would seem that regional analyses of field trips and their manifold pedagogical uses would be of use to small school districts.

11. Complementary Nonschool Activities

In agricultural areas 4-H Clubs, FFA, and Grange activities are usually prevalent. These activities generally are not integrated with the school program; however, insome schools, released time is made available. Some are closely integrated with vocational agriculture programs. These nonschool programs are difficult to assess in their impact on the student. One is inclined to believe the influence is positive, since these programs tend to have practical objectives and frequently require personal commitment and dedication over an extended period of time.

12. Performance of Small High School Graduates

Posthigh school performance of small high school graduates according to the research reviewed is variable and doubtless is a function of the same variables that affect performance in other high schools. The fraction of four-year college graduates estimated for the visited schools does not appear significantly different from state or national norms although the sample of this study has little statistical validity for small schools on a state-wide basis. There was some consensus that small school graduates do tend to have a transition problem when attending large colleges. A good number are thought to weather it in the first year. One teacher suggested that the transition from the personalized small school approach to a depersonalized, mass education campus may be the source of the problem rather than the "inferior" education provided by the small school.

General Recommendations

From the above analysis and from the findings of the visits to the small school districts, the following general recommendations are suggested for consideration.

1. No categorical statement can be made concerning a size limit for high school districts in the State of Washington. The nature of the community, distance of transport, climatic conditions, availability of complementary and supplementary resources and other factors individualize each school to the extent that generalizations are very hazardous.
2. Although consolidation of some small high schools can undoubtedly be accomplished, a number of small high school districts will have to be maintained on a continuing basis. These schools will require more funds on a per-student basis because of the inherent difficulty in providing an adequate selection of subjects for a small number of students at typical large school class loads.
3. Recognizing that the operation of small schools carries the same responsibility for providing educational opportunity as in bigger schools, all means of improving their over-all performance should be explored. Those suggested by the visits include the following:

- Improved organization of small high school districts–including measures for improving management and teaching staff.
- Increased cooperative ventures with other school districts–in all areas of instruction, guidance, and counseling.
- Increased utilization of supplemental resources. It is not enough for small school districts to know certain resources exist–though this is vital; they must know what these resources can do and what exact steps must be taken to employ them in their district. This implies teacher training to insure reception of innovations. Mobile shops, mobile counseling and guidance centers, book and audio-visual loan availability, "do-it-yourself" learning packages to extend class offerings, use of community people, and the like, suggest themselves as areas of examination.

4. The role of the intermediate school district in contributing to improved education in small schools should be clarified.

Reflections on Educational Opportunity School Performance and School Size

The following "reflections" are provided as an aid to understanding how the quality of schools might be related to their size. Certainly as Kontos' summary suggests, there is no simple relationship between quality and size, although it is generally agreed that very small schools are at a severe disadvantage in providing the same kind of education as a larger school.[1]

---

[1] In this treatment the term "small" does not pertain to an enrollment level, as is frequently the case in discussion of school size. The term should be considered only in a relative sense, although "very small" can usually be construed as so small that the educational program is apt to be inadequate.

The reader is warned that the following exposition is quite conjectural and is intended only to stimulate consideration of the factors that influence the performance of schools in general and small schools in particular.

As the scope of required educational service broadens, a more extensive base of student enrollment is necessary to maintain student-teacher ratios at an economic level while offering an expanded curriculum. Theoretically, the larger the school, the greater will be the variety of course offerings. A typical high school having 1,800 students in grades 10 through 12 may provide over 150 quarter, semester, and year-long course offerings during the school year. There will be accommodation in full-size class groupings for both the more capable and less capable students. The curriculum will typically include a number of honors and advanced college placement courses, 3 or 4 foreign languages, 10 subjects in the industrial arts/vocational area, and perhaps 15 subjects on business education. The variety in curriculum is extensive but generally the school still lacks being truly comprehensive.

To carry on an educational program such as that illustrated above requires a substantial concentration of people within the school district, perhaps 30,000-35,000. According to the 1970 census, out of the 39 counties of Washington, 20 had total populations of less than 35,000 each, and 8 less than 10,000. Large diffusely populated areas pose significant problems in bringing together enough students to provide a meritorious educational program at a cost within reason. How, for example, does one provide in a small school the breadth and depth of program offered in larger schools? How far should children be transported to swell the enrollment? What resources are available to complement and supplement routine programs? What are the dimensions of an educational program which will assure that a small high school graduate can successfully compete with one of a much larger school? What is a minimum "acceptable" program? What is the threshold size for providing a minimum program? What are the chances of a high school staff of 10 competing with one of 40? How does one establish comprehensiveness in a small school? What are the economic penalties attached to operation of small schools? Can small schools attract and hold good teachers? Good administrators?

These and many other questions are—and have repeatedly been—raised in considering the task of providing a competitive education in slightly populated school districts.

The small school controversy is usually though of in terms of the quality of education a person receives in a small school as compared with a large school. In a sense this is begging the real question since there are many students in the state now attending small schools who have no other real alternative. Approximately 28,000 students are found in the 150 districts enrolling fewer than 500 total students. The average enrollment in these districts is less than 200. Although undoubtedly a number of these districts can be consolidated without undue travel being required, others because of their geographical location and diffuse population cannot. Thus, the real question is not whether the small school offers a competitive education with larger schools, but rather, can the small school within the limits of available technology and reasonable cost provide an adequate education; one which will enable the recipient to exercise—if not all—a reasonable proportion of options for his future development.

The following analysis is intended to provide a context within which to consider the question of how small schools discharge their educational responsibilities, and how they might improve in this regard.

Several times in this report an ideal school has been referred to as one in which the graduates would have the capability of exercising any options for future development within their innate capabilities. The implication of this premise is that it is the responsibility of the schools to provide more than mere opportunity.

In Table 3 an attempt has been made to separate elements of the educational system into two categories which, for want of better terms, are called "Opportunity" and "Actualization." The items in the opportunity column are those which describe the potential for education provided by the school. Those in the actualization column are the various factors which provide the stimulation or motivation which enables the student to realize the potential offered.[1] The listings are not complete and obviously some items belong in both columns as they may provide both opportunity and stimulus. For example, audio-visual facilities may offer increased opportunity by making possible an individualized course in some unusual subject for which there is insufficient interest to establish a complete class. On the other hand, the alternate learning path provided by the individualized course may be the stimulus which will appeal to a given student.

---

[1] One can also think of the actualization factors as establishing the degree of probability of achieving the proffered opportunity.

Note that the opportunity items are generally things—facilities, courses, programs, etc.—whereas the more important stimuli are people oriented—teachers, parents, community, etc. It is trite to say that learning can only be done by the individual, but it is true, the opportunity and stimuli simply determine how much and how easily he may learn.

It is the intention of the ensuing discussion to consider the elements which comprise the opportunity and actualization aspects of the educational program in terms of school size to see if some generalized school performance relationship with school size can be derived. Basic to this procedure are the following assumptions or premises:

- The performance or worth of a school is measured by the success of the student; this, in turn, is determined by how well he can exercise his options for future development.
- In society's view, the practical worth of a school that offers large opportunity only partially realized is little different than the worth of one that offers less opportunity more fully realized. (If indices representing opportunity and actualization were available, the worth of the school would be related to the product of the two factors.)
- Many of the factors affecting the motivation of students are outside the control of the school. They are frequently spoken of, when negative, as a deficit in the student for which the school must somehow compensate. Part of the crisis in public school education today arises from the difficulty of compensating for these deficits.
- Many of the serious problems of large schools are not problems intrinsic to bigness. More often they stem from economic or other conditions in the urban community, which give rise to societal problems and overcrowding in both community and school. From these emerges a high incidence of educational deficit.

Opportunity Factors

The opportunity factors generally increase with increasing size of the school. Courses tend to be offered in greater number, variety and depth. Expensive facilities such as those required for laboratory and vocational courses can be much more extensive in larger schools since the use factor is greater and there is a broader financial base underlying their operation, maintenance, and replacement. In a large school there is much greater opportunity for including special staff members with substantial expertise in specific subjects. Thus it is not unusual to find a few doctoral level people on the staff of a large high school and full-time staff members in the fine arts are usually found. Special enrichment programs, which may serve also as excellent stimulators, are frequently part of the large high school curriculum. In large schools one finds a great number of extracurricular activities; however, the degree of participation may be higher in the smaller schools. Similarly, the athletic facilities in large schools are more extensive than those in smaller schools, but the participation – despite the opportunity for more extensive intramural programs – may be substantially less. Extramural athletics in large schools involve only a few students and for the rest serve as spectator sports. In small schools an appreciable fraction of the students have opportunity for participation.

From these over-all considerations, the educational opportunity can be expected to be unacceptably low for very small schools. As the size increases, the opportunity increases rapidly until a size is reached that the presentation of a solid basic course becomes feasible. This probably occurs when all teachers are teaching in their areas of training and may be in the range of 150 to 300 high school students. Beyond this point the educational opportunity increases more slowly with size and either approaches a constant value or passes through a maximum. The rationale for this trend at high enrollment is 1) incremental additions do not markedly affect the total opportunity of the school and 2) the availability of some kinds of opportunity lessens with very large enrollments.

This picture of educational opportunity as a function of high school size is graphically displayed as the upper curve in Figure 1. Note that the scales are arbitrary; note also, that the horizontal axis is logarithmic in order better to depict the change in the low enrollment region.

Actualization Factors

Many of the actualization factors are almost completely independent of the school and therefore of school size. The socioeconomic background of the student, for example, is statistically highly correlatable with achievement, but is not a function of school size. Children of strong middle class families do better in our traditional schools than children of reduced means.

Table 3

TYPICAL SCHOOL PROGRAM ELEMENTS

Opportunity

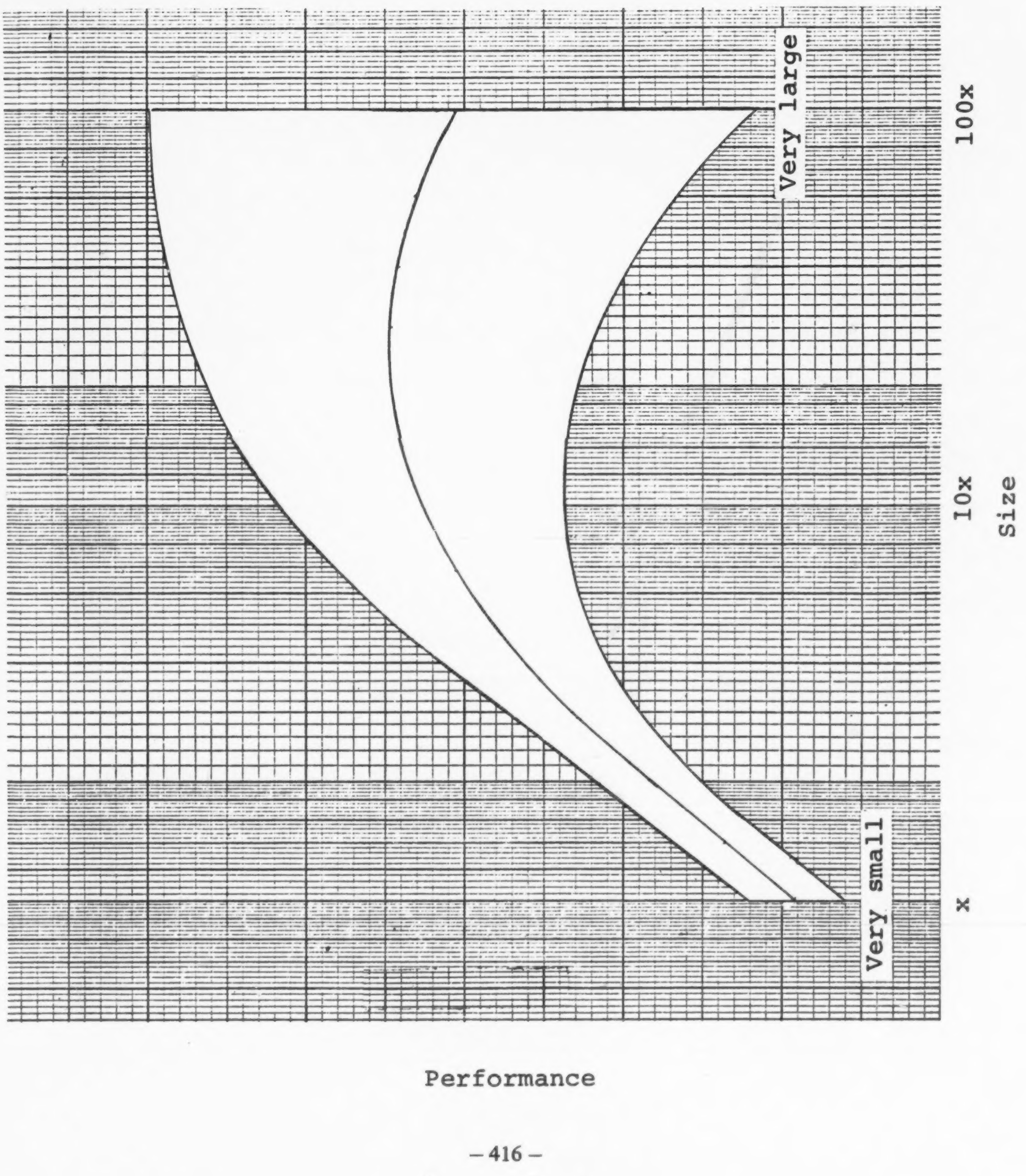
- Variety of Courses
- Depth of Courses
- Library Facilities
- Laboratory Facilities
- Shop Facilities
- Audiovisual Equipment
- Athletic Facilities
- Remedial Programs
- Enrichment Programs
- Extracurricular Activities
- Supplemental Resources
- Teaching Staff Knowledge

Actualization

- Socio-economic Background of Student
- Student Innate Drive to Succeed
- Student Innate Drive Not to Fail
- Relevance of Educational System to Life Style of the People
- School Management
- School Organization
- Teacher Quality and Commitment
- Teacher Expectations
- Reward or Recognition for Success
- Teaching Methods
- Quality of Curriculum
- Extracurricular Activities
- Interpersonal Relationships
- Community Traditions
- Community Provided Educational Programs

Figure 1

SCHOOL PERFORMANCE VS. SIZE
(Generalized)



The innate drive of the student is independent of the school system – although it may be adversely or positively affected. We are all familiar with some Horatio Alger story of "success in the midst of adversity" and also of the proverbial rich scion who fails abysmally despite every material advantage.

The relevance of the educational system to the people served is not *per se* a function of the school size. On the other hand, a small school district with homogeneous population, unanimity of community goals, and relatively stable community traditions may have a much greater relevancy in its program for the students it serves than a large urban school dealing with a variety of socioeconomic, racial, and ethnic backgrounds. The homogeneity of a small school district suggests also that teacher expectations may be more valid than in a larger school where cultural or economic disparity frequently evokes conscious or unconscious prejudice and negative expectation which are inimical to a child's success.

School management in the small district tends to be spread thin as the superintendent and/or principal must fill many roles. In larger schools there are specialists in finance, curriculum, and maintenance, for example, who bring a greater degree of professionalism to these jobs. In a small school district an inept superintendent – since he tends to be a "one-man band" – can bring about educational chaos. Conversely, a very effective manager in a small school district can powerfully and directly influence the entire system in a positive manner. In a large system the inertia is greater and the influence of the administrator is frequently damped out to an appreciable extent.

In a small school, many things are done informally and efficiently, whereas the formality necessitated by a larger school is frequently more time consuming, and promotes less efficiency.

The personal and close relationship that the superintendent of a small district has with all of the people – staff and students alike – is valuable in assessing need and determining response. In the very large districts the administration may be too far removed to bring about timely and effective action in a deteriorating situation. In general, one would estimate that the motivational influence of the school management would increase with district size through some maximum and decline as it becomes very large.

The quality of the curriculum should improve initially with increasing size since there are relatively greater resources to be devoted to these elements. However, the opportunity for redundancy and repetition increases with the number of course offerings and frequently these are difficult to eliminate.

Teaching methodology should improve with increasing size, again because of the greater resources to devote to this subject.

Extracurricular activities are important motivators for many students. Their participation provides a sense of "belonging" and association with the school and hence with school goals. The opportunity to participate in school activities should increase with size initially as more activities become available. As the school becomes larger, the number of students increases at a greater rate than the number of activities and the percentage of participation drops. Whereas in schools of several hundred, participation may well exceed 75 percent, in schools of 1,500 to 2,000, less than half the students may be involved, and the activities may be dominated by a relatively few students.

Interpersonal relationships, among all elements in the small school, appear to be very much in evidence. Thus students, teachers, administrators, and parents all develop understanding of one another as individuals, which is healthy to the educational process. As schools (and school districts) increase in size, the relationships become remote and in the extreme case approach a "dehumanized" status which is currently much decried.

The above considerations suggest that the actualization factors should have greater effect on hindering the realization of educational opportunity in larger schools than in smaller schools. They suggest that some of the most important negative factors may be associated with large schools; but these are primarily sociological in origin and the schools have little control over them. The effect of the actualization factor on the attainment of educational opportunity proffered is graphically depicted by the lower curve on Figure 1. This curve portrays the minimum relative achievement as a function of school size. The large spread between the two curves is primarily due to nonschool sociological factors affecting the students. The downward trend at the large-school end arises from an intensification of these factors in the large schools and the impersonality of the big school systems.

It should be emphasized that the curves are qualitative only, since the actualization factors are not generally quantifiable. However, they are believed to be qualitatively in agreement with experience. Some very large urban schools in ghetto areas whose students are highly disadvantaged both culturally and economically may have fewer than 25 percent of their graduates meeting acceptable standards. Also, the phenomenon of the "turned-off," unmotivated, student in typical large suburban or city schools may exceed 50 percent. Such considerations were used in developing Figure 1.

Figure 1 is useful in thinking about school performance in general and the performance of small schools in particular. (Remember, that in this discussion, performance has the connotation of how well the opportunity proffered by the school is realized by the students and is a function of factors over which the school may have direct control, indirect control, or no control at all.)

The area between the two curves in Figure 1 represents qualitatively the range of performance values for high schools as a function of size. Very good schools will tend to lie in the upper part of the envelope. Very poor schools will tend to lie in the lower part. If this general qualitative approach is correct, one would expect that average schools would tend to lie mid-way between. This is depicted by the center curve.

If one accepts this "average school" performance curve as qualitatively representative of size effects, the following points may be made.

1. High schools having an enrollment in the mid-range do not differ significantly in performance. This is because increased educational opportunity is offset by factors which hinder attainment of that opportunity.
2. The average small school may not be at too great a disadvantage when compared with its counterpart in the mid-range.
3. As the school enrollment becomes very small, it is very difficult for it to compete with larger schools. In the small classes, personal attention tends to narrow the range between good and poor schools, but the fundamental opportunity is significantly less.
4. A high performance smaller school may be far superior to a much larger school whose performance is even average; however, schools are like boxers: a good big one will almost always beat a good little one.
5. It must be remembered that the school provides only part of the capability that an individual requires to exercise options for his continuing development. Where the educational opportunity is low, nonschool activities in the family or community may in some cases replace what is missing. On the other hand, where educational opportunity is high but not being realized, it is unlikely that other resources will compensate.

In summary, the curves of Figure 1 are in general agreement with research on school quality and size which suggests 1) that very small schools are generally not so good as larger schools, and 2) that there are a variety of findings depending on the schools compared. This simply suggests that size is the most important variable only when very small schools are considered. For larger schools other parameters are of much greater significance and tend to "swamp out" size effects. It is therefore unlikely that a set of schools can be found so alike in characteristics other than size, that a truly valid comparison on the effect of size on performance can be made.

Nonhigh School Districts

Less emphasis was placed on the nonhigh school districts than on the high school districts. Only three districts were visited and of these none were in the "remote and necessary" category.

Summary of Interview Data

1. Organization

District F operates traditional self-contained classrooms for its K-7 clientele. It would prefer to handle grades K-6, but the neighboring district, which has absorbed its eighth graders, cannot accommodate those in seventh grade. District G operates a K-8 program which is departmentalized in grades 7 and 8 and partially in grade 6 (Mathematics). District H's K-8 students are distributed between a primary school and a middle school which serves grades 5-8.

2. Curriculum

The programs in Districts F and H are essentially standard elementary school programs. District F offers some special classes in art, and District G in rudimentary home economics. District G also has a departmentalized seventh and eighth grade and departmentalized math in the sixth grade. District H operates a middle school for grades 5-8, which departs significantly from the traditional elementary school and junior high school, and in terms of conventional program includes a number of highly innovative elements. The middle school offers the basic language arts, mathematics, social studies, etc., curriculum, but utilizes a number of different approaches. Team teaching is used in social studies and mathematics, whereas science and language arts appear to work better when taught more traditionally. Mechanical drawing is part of the basic course of study. Electives include instrumental music, vocal music, forestry, experimental science, arts and crafts, remedial P.E. (!) and foreign languages. Electives are free except that eighth-grade students have priority.

3. Teachers

General satisfaction with staff was expressed. District G and, more extensively, District H employed special teachers for their departmentalized programs. The staff in District H includes specialist in music, arts and crafts, mathematics, experimental science and foreign language. The two smaller districts employ noncertificated personnel for library work. Teacher aides are extensively used only in District H, which has two in the primary school and two student aides in the middle school. Teacher turnover in District F runs about two per year, in District G less than one per year, and in District H it was termed low. The staff of District H includes some wives of military personnel, and as a consequence their turnover may vary with the status of the situation at the neighboring military post.

4. Remedial Programs

District F uses DISTAR for remedial reading, also one other program. District G operates an extensive remedial reading/reading improvement program that encompasses all grades and functions daily on a three-quarters basis. One portable is completely devoted to this reading program and appeared to be well furnished with reading aids, including a variety of audio-visual equipment. All grades in District G are furnished with SRA reading laboratories. In District H, specially assigned teachers are responsible for remedial programs which in the past have been somewhat traditional. At the present time, the approach is being reevaluated. Probably more resource and individualized program material will be adopted.

5. Extracurricular Programs

District F appeared to have fewer extracurricular activities than the other districts. District G has an extensive intramural and extramural athletic program. District H offers band and vocal activities and an extensive extramural and intramural program including tennis, golf, and swimming (which is carried out in a neighboring district). District G students participate actively in 4-H Club programs.

6. Counseling and Guidance

None of the districts visited has a professional counselor on its staff. In Districts F and G, the counseling function is performed by teachers and the administrator. In District H, counseling guidance personnel are contracted from outside the district.

7. Student Testing

All districts administer standard achievement tests on a periodic basis. Special psychological testing services are procured from other sources, generally a larger neighboring district. District G makes use of the University of Washington Medical School for diagnosis of special learning disabilities. District H uses the same testing materials and schedule as the receiving high school district.

8. Summer School

District F provides a summer program funded by Title I, District G relies upon a neighboring district. District H's summer program was termed unconventional and relies heavily upon field trips as the framework for a program stressing student achievement and experiencing success. A summer program involving pre-and postkindergarten children was operated last summer with an entire Pacific Lutheran University class. Almost as many "teachers" as children were involved.

9. Library Resources

Library facilities were believed adequate. District F received service of a bookmobile, whereas District G had the availability of a county library in the community. The library in District G had about ten books per child which, of course, exceeds the state standard of seven. All schools subscribed to an audio-visual service generally provided by the intermediate school district. District H has access to a municipal library which sponsors a cooperative summer reading program.

10. Field Trips

As in the case of the small high school districts visited, the nonhigh school districts also make extensive use of field trips. District F concentrates on conservation. District G attends the symphony and opera, and also visits Victoria, B.C. annually. District H students undertake a several-day trip to eastern Washington and are provided a first-hand exposure to the wheat industry. District H, also, has its own camp for field trip activities.

11. Educational Television

District G makes use of Educational TV, and District H extensive use. The primary teachers are alleged to benefit particularly from this source.

12. Assistance from Community

In general only limited use of community personnel is made. Typical are assistance in health clinics, carnivals, special programs, and supplying of room mothers. One district does not have a PTA. District H uses PTA members to serve as hostesses during conference time to smooth the parent-teacher interaction.

13. Assistance from Other Sources

All districts utilize the services of the intermediate school districts for audio-visual/film service. Other services provided by the ISD's included printing, statistical service, in-service training for teachers, and instructional materials. Districts F and G relied upon the receiving high school district for special education, speech therapists, and similar services.

District G interacted with the Seattle Youth Center and University of Washington Medical School. District H has had an extensive summer program with Pacific Lutheran University wherein as many as 50 students (from PLU) were involved in a team teaching program with kindergarten youngsters. District H also involved the aid of a nearby community college in conducting a district-wide survey.

14. Integration with Receiving High School

District F indicated little program integration with that of the receiving high school. In District G, the extent of program integration is unknown. However, there is extensive cooperation as a result of services supplied by the receiving district. The District G graduates were alleged to hold their own and better in the high school. The main interaction between District H and the receiving high school is through conferences between the principals. District H also uses the same (achievement) testing procedures as the receiving school.

15. Food Sources

Districts F and H provide hot lunch service. District G did provide such a program but dropped it because of inability to stay in the black with a reasonable price schedule.

16. Transportation

In District F essentially all students are bussed to school.

Impressions and Conclusions

The following impressions and conclusions were obtained from the visits to the nonhigh school districts.

1. The contribution of the district administration in establishing an innovative and dynamic approach to education appears to be a factor which cannot be overemphasized. In all of the schools visited the innovation and the feeling of a real "live" operation seemed to relate to the enthusiasm of the district leaders.
2. The largest elementary school had the program offering the most educational opportunity. However, there were a number of features that could be installed in smaller schools or districts.
3. As in the case of the high school districts, there are numerous external resources to supplement and complement the local programs.
4. The nonhigh school districts—because they devote full attention to the program—are probably more responsive to the needs of the primary and elementary students than are the high school districts.

General Recommendations

Based upon the impressions obtained in this brief survey the following recommendations are provided for consideration.

1. As in the case of the high school districts, it is probably not possible to establish a meaningful minimum size for small nonhigh school districts. It is likely, however, that an elementary school with small enrollment can provide a more acceptable program than a high school with a comparable (not equal) number of students.
2. Where consolidation is practical and can be expected to result in an improved program, it should be promoted. However, as in the case of the high school districts, a number of small schools will remain, and the needs of their students must be satisfied as well as possible. Although the total number of school districts (both high and nonhigh) in the state having enrollments of less than 500 students is 45 percent of the total, they enroll less than 4 percent of the students. Thus, the added expense of compensating for geographical disadvantage need not be high.
3. Consideration should be given to means of improving over-all performance of all elements of the system: organization, management and staff, cooperative ventures with other districts, and utilization of all supplemental resources including the intermediate school district.
4. Serious consideration should be given to the advisability of consolidating secondary programs and maintaining nonhigh school districts. There is reason to believe that nonhigh school districts may be more responsive to the needs of elementary students than the high school districts which may consciously or unconsciously orient their programs to the secondary level. On the other hand, a good case can be made—and advantage shown—for an integrated school program that encompasses all grades. The uncertainties involved, along with current emphasis on vertically integrated educational programs, suggest that this area requires greater clarification.

APPENDIX

APPENDIX

CHARACTERISTICS OF SCHOOL DISTRICTS VISITED

District A

District A is located in an agricultural area of eastern Washington. Almost all of the students live on farms and most are bussed to school. Because of the remoteness and, at times, difficult winter travel, several students from the outer reaches are domiciled in town during the winter. (For this, in-lieu-of-transportation financial support is provided.) The region included in the district has been settled for a long time and many of the families are remotely related to each other. As a result of geography, occupation, climate, and tradition, the school patrons are quite conservative and apparently hold a somewhat traditional "3R" attitude toward education.

Although the parents do not demonstrate a very active interest in the academic aspects of the school program, they are alleged to entertain high expectation for their children with respect to higher education.

The school has about 75 students, 30 in the high school. A certificated staff of 8 serves the 1-12 program.

District B

District B is located in south central Washington. The community is a single-industry community and practically all except the few who provide services work in that industry. Essentially all of the students live within five miles of the school and the bulk reside within the town. The people tend to know each other very well and the community is apparently close-knit. Although located in a rural area, this school district's patrons may, perhaps, have more in common with the working class city dwellers than their rural, agricultural counterparts.

The district has a low assessed valuation but a good history of approving special levies. The year 1970 was an exception, however, and the special levy, which exceeded 80 mills, was not approved.

The school has an enrollment of about 125 with 35 in the high school. Nine certificated teachers serve the 1-12 program.

District C

District C is located in southwestern Washington. It is situated in an agricultural region but is near to timber country. Most of the patrons of the district are involved in agriculture or in the forest-products industries. About 95 percent of the students are bussed to school or drive themselves. The community is fundamentally middle class and somewhat conservative. Parents take an active interest in the school and have assisted in the presentation of music and art courses. Women from the parent-teacher organization provide voluntary aid in hearing testing and similar services. The organization also provides scholarships, a contribution which implies strong parental interest in higher education for the youth.

The school has about 300 students, of whom about 90 are in the high school. The staff includes 17 certificated personnel.

District D

District D is located in the east central part of Washington. It is situated in a prosperous farming area from which—with exception of a small number of students—the student body stems. About 80 percent of the student population is bussed; the most remote students live 25 miles away.

The community could be termed upper middle class and appears to be education oriented. A number of parents are college graduates. Citizens serve on a special levy advisory committee and a PTA and Lions Club are very supportive.

The school serves about 400 students, of whom about 170 are in the high school. The disproportionate number of secondary students occurs because of the existence of nonhigh school districts in the region. The certificated staff, including the superintendent, numbers 24.

District E

District E is the largest of the districts visited. The district is in an area of small farms which in general are not of sufficient size to be self-supporting. However, the district does include some heavy industry and its assessed valuation is quite high. Many of the families residing in the attendance area are quite poor. Some are seasonal (agricultural) workers, who live in substandard housing and supplement their livelihoods by raising a garden and perhaps a few pigs, cows, or chickens. The community is probably working class on the socioeconomic scale. The educational experience of most students' parents is limited, and there does not appear to be a strong influence on the part of parents to encourage college aspirations among their children.

The school is heavily used by both adults and young people, as it is available on a no-cost basis for community activities. There appears to be good support of the district from responses to district questionnaires and traditional support for special levies.

Because of the unusual local circumstances affecting student safety, school patrons have insisted upon extensive bussing of students, for which they are apparently willing to pay. The district has about 550 students, of whom 150 are in the high school. There are 33 certificated staff, including the librarian and superintendent.

District F

District F is in central western Washington not far from the west coast of lower Puget Sound. The district is perhaps unique having a high assessed valuation due primarily to summer homes with small resident population. It has no town with population over 300; it has no churches. Essentially all students are bussed. The residents are primarily working class. Many live on "stump farms" where they raise produce and some stock for their own consumption.

The school operates a K-7 program. A neighboring district accepts the eighth graders, but is too overcrowded to accept the seventh graders.

District F has not had to resort to special levies, but its financial position is less sound than in the past.

District G

District G is in a bedroom community in King County. The assessed valuation is not large. The student population is at the present time declining. The residential population includes a relatively high percentage of retired people. The community people support the school well and have never failed to pass the special levies infrequently required in the past. (A special levy will, however, be required for school year 1971-72.) The people are good "boosters" of their school, which is housed in an exceptionally attractive plant.

District H

District H is a large nonhigh school district located near Puget Sound. It has been a high growth district, averaging a growth of 20 percent per year for the last three years. The tax base is about twice the state average and is derived two thirds from industry and business and one third from individual tax returns. The community is typically middle class and supportive of the school system. The last special levy was approved by 80 percent of the voters.

District H operated a K-8 program using a primary (K-4) and middle school (5-8) organization. The school appeared to include a number of innovative elements.

HIGH SCHOOL DISTRICT DATA[1]

1968-69 SCHOOL YEAR

	A	B	C	C	E
Average Annual Enrollment	77	124	310	388	515
Net Cost – Dollars per pupil	$ 1,526	$1,088	$ 614	$ 847	$ 738
Assessed Valuation – Dollars per pupil	$ 25,866	$5,734	$7,872	$17,832	$13,517
Number of Students (10/1)					
Elementary	42	56	210	241	358
Secondary	33	68	94	148	145
Total	75	124	304	389	503
Number of Full-Time Teachers					
Elementary	4	6	7	8	15
Secondary	3	4	8	8	11
Total	7	10	15	16	26
Total Number Certificated	7	18	17	25.2	29
Total - All Staff	16	24	21	28.2	41
Student-Teacher Ratio					
Elementary	10.5	9.3	26.3	30.1	23.8
Secondary	11.	17.0	13.4	18.5	13.2
Total	10.7	12.4	20.3	24.3	19.3

NONHIGH SCHOOL DISTRICT DATA

	F	G	H
Average Annual Enrollment	184	252	698
Net Cost – Dollars per pupil	$ 578	$ 568	$ 541
Assessed Valuation – Dollars per pupil	$34,235	$5,825	$11,745
Number of Students (10/1/70)	192	266	654
Number of Full-Time Teachers	7	8	22
Total Number Certificated	8.5	9.5	33.6
Total All Staff	15.5	14.5	49.6
Student-Teacher Ratio	27.4	33.3	29.7

---

[1] From State Department of Public Instruction Data.

GUIDELINES FOR SCHOOL DISTRICT REORGANIZATION

428/429

GUIDELINES FOR SCHOOL DISTRICT REORGANIZATION

Introduction

The search for guidelines to establish optimum size for public education units is not new, it is a multimillion-dollar question, highly related to program quality. Study of optimum size has ranged all the way from the school district itself down through subunits such as elementary-secondary or departmental, to the size of the individual class itself. This brief review will focus attention primarily on the question of optimum size ranges for school districts and the implications for either the consolidation of school districts which remain "too small" or the breaking apart of great city units which appear to be so large as to be virtually unmanageable. For reasons which will be examined later, the mere mention of school consolidation or decentralization almost always arouses a sharp reaction, and when a state legislature proposes legislative solutions to these problems, it is almost certain that considerable heat will be aroused in the process.

Nevertheless, attention needs to be periodically refocused on the question of optimum size. Public education consumes major portions of tax monies from state and local sources, and with constant pressure to initiate or expand new programs and services, old organizations and organizational patterns must be reexamined to see how they meet the new demands of society. This necessity may result in disturbing the *status quo,* and for those persons holding power or position in existing structures, the matter of job security may become fairly intense. However, one must weight the importance of maximizing the effect of limited public tax resources and of achieving the best possible results from educational enterprises. It is against this backdrop of urgent needs that the optimum size question must be regularly reopened; and action, via new policy or legislation, must be taken when and where indicated.

John Gardner aptly summarized the requirement to review organizations and their structures in a few cogent words:

> In short, men must be discriminating appraisers of their society, knowing coolly and precisely what it is about the society that thwarts or limits them and therefore needs modification. And so must they be discriminating protectors of their institutions, preserving those features that nourish and strengthen them and make them more free. To fit themselves for such tasks, they must be sufficiently serious to study their institutions, sufficiently dedicated to become expert in the art of modifying them.[1]

In retrospect, the educational enterprise has not been among the most innovative organizations of society. Early studies indicated as much as one half century between the identification of a need and general acceptance of the solution.[2] However, there is since more recent evidence that indicates that this lag has been shortened.

Historical Background

The question of optimum size has been under close examination for decades. Writers on the educational scene as early as Horace Mann in 1837, right up to the most recent issue of the *Phi Delta Kappan,* have been examining the questions related to consolidation and decentralization. The early writers were, as might logically be expected, more concerned with the question of consolidation; the great city school has emerged as a pressing educational problem only during the last two decades. In the 1920's, 189,227 one-room schools were reported throughout the United States, but this number has been steadily diminishing and was reported below 26,800 in 1966.[3] There have been a number of major impediments to school consolidation over the years, and a few of these are worth examining briefly:

---

[1] Gardner, John W., "Uncritical Lovers, Unloving Critics," commencement address at Cornell University (Ithaca, June 1, 1968).

[2] Paul R. Mort, "Studies in Educational Innovation from the Institute of Administrative Research: An Overview," *Innovation in Education,* Matthew B. Miles, ed. (New York: Bureau of Publications, Teachers College, Columbia University, 1964), p. 318.

[3] Dan H. Cooper, "Local School Systems," *Encyclopedia of Educational Research,* 4th Ed., p. 753.

1. Local school trustees have sometimes viewed the school board membership as a route to higher political office and have been loathe to yield this position of relatively high community exposure.

2. Considerable local pride has existed for the local school, especially as characterized by the nearness of the school to the family, the success of the competitive sports program in secondary schools, etc. These factors have been further compounded by an almost innate human resistance to change.

3. Apprehension about the results of any kind of administrative reorganization has existed, and the whole question of job security has generated resistance both from within the system and throughout the community.

4. Processes by which reorganization could be accomplished have frequently been blocked by the policy and legislative rules and procedures which have served faithfully as deterrents to modification.

5. Some state foundation programs have tended to favor maintenance of local units on a small-size basis even though evidence was at hand clearly indicating the small district was inefficient.[1]

It is very clear, however, that in cases where the state legislature effects school consolidation by means of financial remuneration for those districts willing to make the break, the process has been greatly expedited and the number of districts within the state dramatically reduced. A good case in point is New York State, which has been working intensely on this problem for over three decades. The state foundation law was rewritten in such a manner as to make school district reorganization attractive, so consequently the pace quickened.

Also assisting the problem on a nation-wide scale has been the dramatic improvement of the road system and transportation equipment. When pupils had to be transported under unreliable or unsafe conditions, it is not difficult to understand why community resistance towards losing the nearby school remained high. The problem of transportation has fairly well resolved itself into matters of money and time.

While considerable progress has been made in the area of school consolidation, it is also unquestionably clear that some schools will remain to be "remote and necessary" simply because of the logistics involved in their situation. In a state where the population is extremely sparse and isolated, it is simply impossible or, at the least, impractical to effect further consolidation.

The national organization of school administrators reported on the question of inadequate school districts and found that many of the following characteristics exemplified deficiencies at both the elementary and secondary levels:

1. Barren, meager, insipid curriculums, particularly at the secondary school level.

2. Inability to attract and to hold high-quality teachers and administrators.

3. Inability to construct the school plans needed.

4. Needless waste of manpower through unjustifiably small classes and low pupil-teacher ratio.

5. Unreasonably high per-pupil expenditures for the quality of educational programs provided.

6. Inefficient use of financial and other educational resources.

7. Poor location of buildings.

8. Inequality of the burden of school support.

---

[1] *NEA Research Bulletin*, Research Division of National Education Association, Vol. 38 February 1960, p. 17.

9. Cumbersome, complex formulas for distributing state school aid.

10. Absence of many needed specialized educational services that add quality to the educational program.[1]

Unhappily, the situation in large metropolitan school districts such as New York, Chicago, Philadelphia, and, yes, Seattle now presents an enigma on the other end of the size continuum. These districts are costing the supporting taxpayers more money to maintain and operate than are the more "average" size schools often found in the suburbs around the great cities. This is further compounded by the fact that the sheer size of the system tends to make it very depersonalized indeed. Fred Hechinger once observed that "anybody who knows the system also knows where the operational action is and who controls it–it is in each school and it is controlled by the principal."[2] He concludes his analysis by urging that the great city schools provide more local control by giving the principal, along with the entire staff, considerable autonomy in operating the school. This would even extend to considerable budgetary control. One would reasonably expect that an operation as huge as New York City Public Schools would require some kind of administrative reorganization. It has 860 schools and a budget approaching one billion dollars a year, plus a staff equal to three army divisions. That this kind of system is inefficient and depersonalized is hardly a surprise to any observer. Some have even gone so far as to insist that one possible way to protect the individual against this almost faceless system is to provide an ombudsman in the local school system as a complement to reorganization.[3]

This matter of decentralization of the great city schools to effect improvement is indeed a recent phenomenon; however, the emerging need was evident more than two decades ago. Insight into this can be found in the Bronx Park experiment which was conducted from 1949 through 1952 in New York City. Under this experiment, control for local schools was delegated to the Bronx Park committee and within a four-square-mile area with a population of 141,000 people, a serious experiment was undertaken to find out what outcomes could be achieved by delegating responsibility and authority to smaller units. The project clearly indicated that in a great city, efficiency can be lost and optimum size vanish when the unit remains so large as to be unmanageable. On the other hand, local people grappling with local problems as they did in the Bronx Park experiment demonstrated that new approaches to a burgeoning school population could be productive.[4]

In his major studies of American education, James B. Conant dealt rather extensively with the question of bigness and smallness. He was particularly concerned with the small high school for he felt that it was not practical for such a school to offer a comprehensive program, or if such a program were offered, it would be prohibitively expensive. He discovered that 17,000 high schools had graduating classes of fewer than 100 students.[5] Conant concluded that the solution to this problem was to have the state department of education initiate planning for school district reorganization on a state-wide basis. He then cites New York's Master Plan as a paradigm to be followed.[6]

This summary has only touched a few capstones in the reorganization movement in the United States, but it has covered all types of units–schools and districts–and levels of education. The movement has been slow and uneven. It has failed, in many cases, to meet the needs of our society; but it has demonstrated that under courageous leadership, progress is possible. This should continue to be our goal in seeking the optimum size school.

Much of the more graphic details of the historical research studies and expert opinion developed over the optimum size question are revealed in Table 1, following. Farrar and Purdy examined recommendations on optimum size extending through the three basic units: school districts, elementary

---

[1] American Association of School Administrators, *School District Reorganization* (Washington, D.C.: The Association, 1959), p. 23.

[2] Fred M. Hechinger, "Reform the City Schools," *The New York Times*, November 21, 1966, p. 42.

[3] R. Oliver Gibson and Harold C. Hunt, *The School Personnel Administrator*, (Boston: Houghton, Mifflin, 1965), p. 439.

[4] Donald H. Ross, *Administration for Adaptability* (New York: Metropolitan School Study Council, Teachers College, Columbia University, 1958), pp. 221-33.

[5] James B. Conant, *The American High School Today* (New York: McGraw Hill Publishing Company, 1959), p. 81.

[6] *Ibid.*, pp. 82-83.

473

schools, and secondary schools. A pattern emerges and should be revealing to those willing to study this issue on an objective basis.

The Hickey Monograph

Michael E. Hickey has prepared one of the most comprehensive contemporary documents that concentrates on the status of optimum school size.[1] The need to reassess redistricting has included at least the following causes:

1. Efficiency of operation.
2. Maximum use of limited resources.
3. Increased public accountability for educational expenditures.
4. Equality of educational opportunity.
5. Assumed relationship between size and quality.

Some professionals in education view the word "optimum" with grave misgivings or even alarm when it is applied to the educational organization. As with research in the behavioral sciences, considerable variability may exist in situation after situation which makes it difficult or impossible to lay down generalized rules to fit all cases. This same phenomenon has caused researchers in optimum size studies to reach conflicting conclusions about what would appear to be similar situations with similar ingredients. Definition of adequate criteria has lagged, and one man's evidence of an optimum situation may differ markedly from another's.

When one considers the aforementioned difficulties in optimum research and then makes even the most cursory examination of the natural, built-in resistance that educational systems have to redistricting, it is quickly apparent that neat, quick solutions will be most elusive. The almost reverent position held by the "local control" concept in American governmental and educational enterprises adds a further dimension to the problem. It can logically be argued, however, that local control will *not* be lost by redistricting. Once school districts are truly viable and strong, the need to bolster the weak, inefficient units by state regulations diminishes, resulting in more, not less, local control at the school district and community level.

To repeat, inadequate districts evidence the following major areas of weakness:

1. Inadequacy of curriculum.
2. Inability to draw and hold high-quality teachers and administrators; inefficient use of available staff.
3. Economic inefficiencies in terms of high per-pupil expenditures for quality of program provided.
4. Inequality of effort required for support.
5. Absence of special services.

Contrasted with these are five criteria for stating size of educational units which have emerged over the past thirty years:

1. Scope of program (such as inability to provide vocational-technical programs).
2. Range of services (such as guidance and gifted programs).
3. The community (such as the need for "special arrangements" if the district's student population is below 10,000).
4. Administrative and instructional staff (such as rises in per-pupil administrative costs when student population drops below 10,000).
5. Economic base (such as assessed valuation, population, and local tax effort).

Trends in the reorganization movement are discernable: First of all, with continued growth in the great cities, plus continued population movement from rural to urban life, pupils are concentrated in fewer districts. Secondly, the decentralization of administration in the great cities' school districts is clearly becoming a more pervasive trend. Finally, "local communities" of the great cities are demanding—and receiving—a larger voice and involvement in school affairs.

---

[1] Michael E. Hickey, *Optimum School District Size* (Eugene: ERIC Clearinghouse on Educational Administration, University of Oregon, December 1969).

Table 1

SUMMARY OF RESEARCH AND OPINION ON OPTIMUM SCHOOL SIZE[1]

THE ADMINISTRATIVE DISTRICT

Individual/Organization	Minimum	Optimum	Maximum
National Commission on School District Reorganization (1948)	10,000		
Howard Dawson, NEA Dept. of Rural Education	1,600	9,800-12,000	
Harlan Beem, Midwest Educational Research Center		11,000	
Edgar Morphet, University of California	1,200	10,000	
Teachers College, Columbia University (1961)		20,000-50,000	
William P. McLure, University of Illinois	5,000-6,000		
George Peabody College (1965)	10,000	15,000-20,000	
Connecticut Department of Education	5,000 for regionalized school districts		
Stephen Knezevich, American Association of School Administrators		10,000-12,000	

THE ELEMENTARY ATTENDANCE CENTER UNIT

Individual/Organization	Minimum	Optimum	Maximum
White House Conference on Education (1956)	225-250	300	
NEA Dept. of Elementary School Principals (1954)			500
National Commission of School District Reorganization	175	300	
New York Council for Administrative Leadership (1961)	500		900
Ohio Dept. of Elementary School Principals (1966)	300	500	750
Howard Dawson, NEA Dept. of Rural Education	240		
William Rosenstengel	175	525	750
M. I. Cushman	175		
Ralph Sollars, Ohio State University 1963		400-499	
State Departments of Education--California, Illinois, Iowa, Minnesota, Pennsylvania, Connecticut, Florida, Georgia, Mississippi, Missouri, New Hampshire, New York, Washington	Generally agree on minimum size of one teacher for each grade, optimum of approximately 2-3 sections per grade, and 4 sections per grade as a recommended maximum.		

THE SECONDARY ATTENDANCE CENTER UNIT

Individual/Organization	Minimum	Optimum	Maximum
White House Conference on Education (1956)		700-1,000	
National Commission on School District Reorganization (1948)	300-450		
State Board of Education Study--Vermont--1964	600-2,000		2,000
Interim Commission Study--New Hampshire--1961		500	
George Peabody College (1965)	100 (Graduating Class)		
James Conant (1959)	100 (Graduating Class)		
State Departments of Education--New Jersey, New Hampshire, New York, Vermont, Washington, Wisconsin	Generally agree on either a 500 student or a 100 student graduating class as minimum size.		
William McClure, University of Illinois	700	1,000-1,200	
Ohio Association of Secondary School Principals (1966)		1,350-1,500	
Korwitz and Sayres Study in New York	500	600-800	

---

[1] Source: Roger D. Farrar & Ralph D. Purdy—"The Factor of Size and School District Organization--Composition", ERIC.

Table 2

SUMMARY OF OPTIMUM SIZE RECOMMENDATIONS[1]

Criterion	Optimum Size	Source
Community control	50,000 total population	Havighurst (1968)
Community control	7,000-8,000 pupils	Havighurst (1968)
General quality	10,000 pupils (min.)	State of California
General quality	28,000 pupils	Swanson (1962)
General quality	50,000 pupils	Benson (1965)
General quality	1,500 pupils (min.)	Conant (1969)
General quality	10,000 pupils	Packard (1963)
General quality	25,000 pupils	Comm. for Economic Development (1960)
Quality/economy	10,000-20,000 pupils	Faber (1966)
Quality/economy	5,000 pupils (min.)	Fitzwater (1958)
Quality/economy	5,000-6,000 pupils (min.)	McClure
Quality/economy	12,000 pupils	Dawson (1948)
Effectiveness	10,000 pupils	Nat. Comm. on School District Reorg. (1948)
Cost/pupil	50,000 pupils	Hanson (1962)
Tax effort required	12,000 pupils	Vincent (1966)
Special staffing	25,000 pupils	Vincent (1966)
Net current expenditure	50,000 pupils	Vincent (1966)
Elementary school unit	500 pupils (max.)	NEA DEP (1954)
Secondary school unit	700-1,000 pupils	White House Conf. on Education
Administrative decentralization	300,000-500,000 total pop.	Havighurst (1968)
Administrative decentralization	20,000 pupils	Passow (1967)
Administrative decentralization	12,000-40,000 pupils	Bundy (1967)
Administrative district	20,000-50,000 pupils	IAR, Columbia Univ. (1961)
Administrative district	15,000-20,000 pupils	Peabody Coll. (1965)
Administrative district	10,000-12,000 pupils	AASA (1959)
Special Services:		
Adult education	20,000 (min.)	Great Plains School District Organization Project (1968)
Business administration	35,000-50,000 pupils	
Electronic Data Processing	100,000 pupils	
Special education	20,000 pupils	

---

[1] **Prepared by Michael E. Hickey.**

The Kontos Monograph

In his special report prepared for the Temporary Special Levy Study Commission, George Kontos utilized the number of pupils enrolled in the various school districts as a major criterion in order to examine influences on pupil achievement, education costs, breadth of educational program, extracurricular activities, professional staff qualifications, and special services.[1]

Regarding pupil achievement, Kontos concluded that the secondary schools had received the most attention in prior studies of this issue, but did find evidence that elementary schools below the 100-to-200-pupil range performed on selected achievement measures below students in the larger schools. Considerably more evidence of this phenomenon is available in the larger number of secondary schools under similar study. While some constraints must be made on accepting the larger school advantage at face value, nevertheless, the pattern of larger school advantage emerges from studies cited.

The preponderance of studies that compared size of enrollment with educational costs were also at the secondary level. Secondary schools below the 350-student level appear inordinately expensive (and it should be recalled that in *The American High School Today*, Conant recommended graduating high school classes of at least 100 pupils in order to achieve comprehensiveness). On the other hand, the behemoth great city schools going beyond the 150,000 student population face the dangers of bureaucratic rigidity and impersonality–along with rising costs.

These findings regarding enrollment size and educational costs were buttressed in the Commonality Study (see above) and are portrayed graphically in the following chart. It is clearly discernable that the large urban centers of Washington (especially size groups 1 and 2) have notably higher per-pupil costs than those of groups 3-6. The small schools represented in group 7-8 rise toward the inordinate cost heights represented by group 9. This group clearly illustrates the influence of the extremes of school district size on higher costs and highlights the economic advantages of "not too large or not too small." The influence is discernable both with elementary and secondary programs. Although it appears that the application of the per-pupil-cost criterion to the establishment of cost optimums will be effected, it must be remembered that the "remote and necessary" criterion will still have to be taken into consideration by those responsible for policy making and/or legislation.

Nevertheless, the data indicate need not only for further study but for further action aimed at establishing schools within the optimum cost range insofar as this is compatible with the other criteria to be considered. In all probability, work is now in progress which will further accentuate the spread already evident in the cost data. For example, if large city schools find it necessary to provide guards in schools, costs can be expected to rise. If a small school district experiences continued outmigration, costs can be expected to rise. Responsible leadership at the state and local levels must be cognizant of these trends and be prepared to take action where indicated.

However, in viewing these data, one is admonished not to use total cost per pupil without analysis or interpretation for program comparison. Voiland found schools utilizing excess costs in a variety of ways requiring study and interpretations.[2]

When the size of enrollment is contrasted with the breadth of the educational program, the preponderance of the literature and studies reviewed favored the larger schedule. Smaller schools were simply unable either to support critical curricular offerings or to provide special services unless they combined energies as was done in the Catskill Project in New York State. The acceptability of size ranges for adequate curricular/service offerings, as well as a justifiable economic base, is displayed in the two summaries contained in this report (Hickey; Farrar-Purdy).

The very few studies that have attempted to relate school and district size to extracurricular programs do not shed as much light on the subject as one might hope. Moreover, some conflicting findings were reported.

As regards the relationship between size of enrollment and professional staff qualifications, the research generally indicates a positive relationship. Advanced degrees and experience were found more abundantly in the larger districts, probably as a result of the higher salaries offered. Professional stimulation and flexibility appear correlated to district size, with the range extremes again suffering.

Special services, such as guidance, counseling, and psychological services, are markedly influenced by district size unless, as mentioned previously, "special arrangements" are made, as with shared services.

---

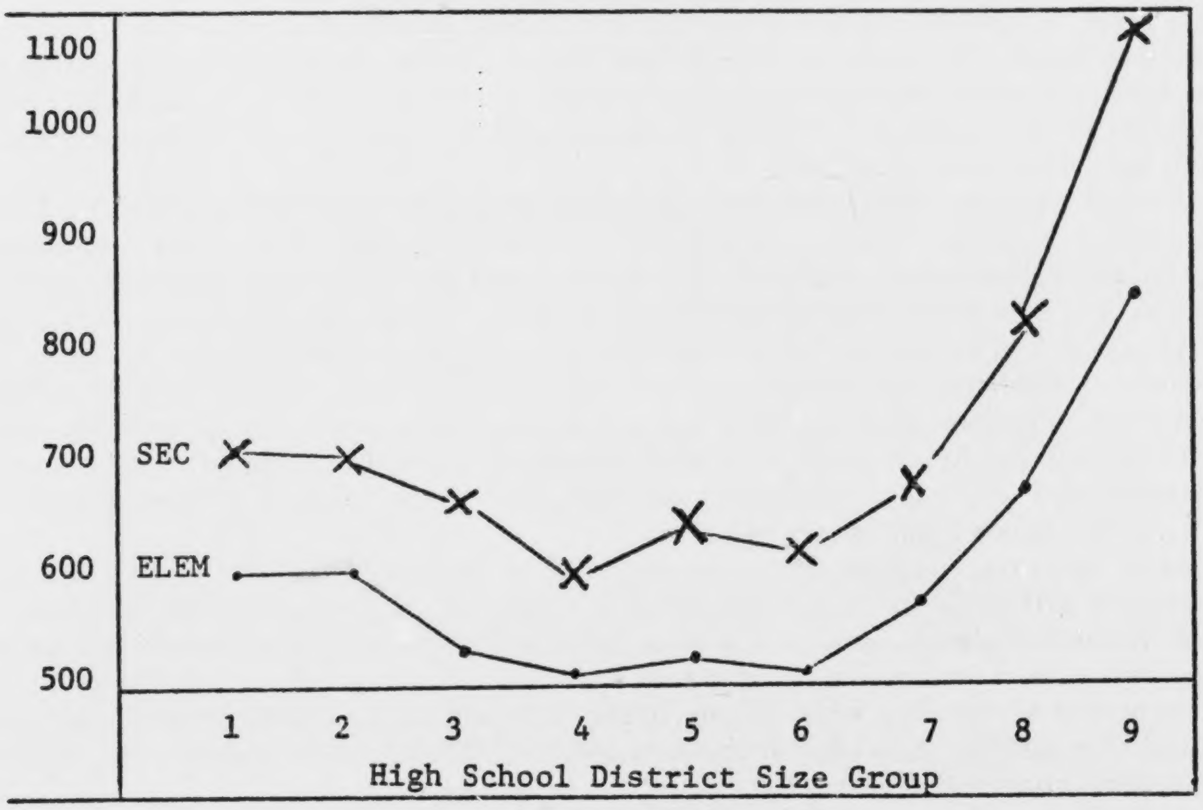
[1] See George Kontos, *What Education Research Says About The Effect of Size on Selected Aspects of the Education Process*, above.

[2] E. E. Voiland, *Analysis of Costs: Large School Study*, above.

On the basis of the evidence, several general conclusions may be reached: Consensus indicates, for example, that the 300-to-400-pupil range is recommended for elementary schools. Also favored are secondary schools slightly above the 1,000-pupil level. A student population per district of 10,000 is often mentioned as desirable and the national trend still appears pointed towards consolidation and reorganization.

Figure 1

PER-PUPIL COST OF ELEMENTARY AND SECONDARY PROGRAMS–SIZE GROUP AVERAGES STATE OF WASHINGTON 1968[1]



Where Size Groups Are:

1	Above 20,000
2	10,000-19,999
3	5,000- 9,999
4	2,600- 4,999
5	1,600- 2,599
6	1,000- 1,599
7	500- 999
8	200- 499
9	Below 200

---

[1] Source: James W. Johnston, *Commonality Analysis.*

Redistricting

For a long time, the question of redistricting posed a problem to educators. However, such is not the case today. One might say that the tide has turned and the technical problem of redistricting no longer exits; instead, the problem today is one of determing optimal school district size. Moreover, research surveyed and discussed in the earlier chapters indicates very clearly that there are already some guidelines regarding optimum school district size.

Rather than document historically the development of school redistricting and/or legislative reapportionment models (these have been surveyed and documented by Heckman,[1] Dinish[2], and Gangwish[3]), this section focuses on the two applications of a reapportionment program to school redistricting developed by Marker and Hoover.[4]

The first application of Marker and Hoover's model was conducted by the authors in Pittsburgh where the problem focused around school attendance determination for Pittsburgh's Five Great High Schools. In short, the authors were able to redistribute the school population from 22 school attendance areas to 5 using as variables or inputs to the model: 1) capacity of the school; 2) proximity of pupils to their school; 3) racial composition; 4) average family income; and 5) average years of education for adult members of the household.

While different weighting factors can be assigned to the variables, the objective of this study was to come as close to the solution shown in Table 3 as possible. The best or optimal solution was found by setting the weighting factor for each variable at one. Table 4 contains the solution using this choice of weighting factors. Figure 2 shows the computer printout (map) produced using this model with the data shown in Table 4. The uncircled digits 1 to 5, indicate which of the 189 census tracts were assigned to each of the Great High Schools.

Table 3[5]

ENROLLMENT BY SCHOOLS ACCORDING TO WEIGHTS GIVEN STATED CHARACTERISTICS PITTSBURGH GREAT HIGH SCHOOLS–1971

	School Size	Pupil Distance	Fraction Nonwhite	Median Income	Adult Schooling
School 1	12,000	0	.21	$5,600	10.0 years
School 2	11,000	0	.21	5,600	10.0
School 3	9,000	0	.21	5,600	10.0
School 4	10,000	0	.21	5,600	10.0
School 5	11,137	0	.21	5,600	10.0

---

[1] Leila B. Heckman, "School Districting" (unpublished master's thesis, Cornell University, 1968), pp. 1-39.

[2] George A. Dinish, "A Plan to Reorganize the School District of New Jersey" (unpublished doctoral dissertation, The State University—Rutgers, 1968), pp. 1-65.

[3] Nicholas Gangwish, "A Computerized Simulation Model for Boundary Planning" (unpublished doctoral dissertation, Florida State University, 1970).

[4] Gordon A. Marker and Edgar M. Hoover, *Urban School Planning*, Regional Economic Development Institute, Paper No. 1 (Washington, D.C., 1968).

[5] *Ibid.*, p. 11.

Table 4[1]
OUTPUT USING EQUAL WEIGHT FOR ALL VARIABLES

Weights:	1	1	1	1	1
School 1	11,972	6.52	.21	$5,304	9.5 years
School 2	11,303	5.83	.21	6,225	10.8
School 3	9,023	5.52	.21	5,315	9.7
School 4	9,654	8.54	.21	5,394	10.1
School 5	11,185	7.13	.21	5,738	10.0

Notes to Table 3 and 4:[2]

School locations are those of proposed sites for Pittsburgh's Great High Schools, *viz.:* 1) Northside, 2) East Liberty, 3) Mount Washington, 4) Moore Field, and 5) Panther Hollow.

Each unit of distance approximates about 900 feet. Distances are measured from the centers of census tracts.

The 1960 Population Census is the basic data source on nonwhite population, average gamily income, and average years of education for the adult population in each of Pittsburgh's 189 census tracts. In order to approximate the 1971 high school age population for the city, the 5-9-year-old cohort was used for each tract as given in the 1960 Census.

Returning to the question of optimum school district size and redistricting, one can easily substitute district size for school size in the above application and, neglecting the other variables, use the Marker and Hoover model to redistrict using school district size as the sole variable.

The second application of Marker and Hoover's model was carried out in 1970 by Raymond Soller.[3] This researcher used compactness,[4] population, and social trait as variables. What Soller did, in effect, was to use dummy data to illustrate the applicability of the reapportionment program to school redistricting. The illustration consists of ten attendance areas (A through J) and uses the assumption that each area contains 1,000 junior high school students.[5] Table 5 contains the data for each attendance area used by Soller by junior high school.[6] Table 6 is a summary of the data in Table 5;[7] while Figure 3 shows the geographic location of each attendance area and location of each junior high school. The heavy lines in Figure 3 show the existing school district boundaries.

Assuming that the districts wish to emphasize compactness, to postulate 3,500 students per junior high school as ideal, and to set a racial mix of 21 percent Negro as desirable, the reapportionment program was run. Table 7 contains a summary of the optimal solution to this case study. Figure 4 illustrates the reassignment of unit areas to school districts. The heavy lines, as in Figure 3, show the proposed, or suggested, district boundaries.

The reapportionment program discussed in the preceeding pages is a useful tool for any regional coordinator, educational or otherwise. The model is both simple and easily understood, thus requiring very little expertise to use. The two applications of the program clearly indicate that the technical problem of redistricting has been solved.

---

[1] *Ibid.*, p. 12.

[2] *Ibid.*, p. 17.

[3] Raymond Soller is currently the program librarian at Florida State University's Computing Center.

[4] Compactness was measured in terms of the smallest possible number of unit neighbors.

[5] The illustration uses 3,500 as the ideal enrollment at each of the three junior high schools. (This figure was chosen arbitrarily by the author.)

[6] Raymond Soller, "A Legislative Reapportionment Program Applied to School Redistricting" (unpublished paper, Florida State University, Tallahassee, Florida, November 21, 1969), p. 6.

[7] *Ibid.*, p. 7.

FIGURE 2

MAP PRINTOUT
CITY OF PITTSBURGH, CENSUS TRACT ASSIGNMENTS TO FIVE SCHOOL DISTRICTS

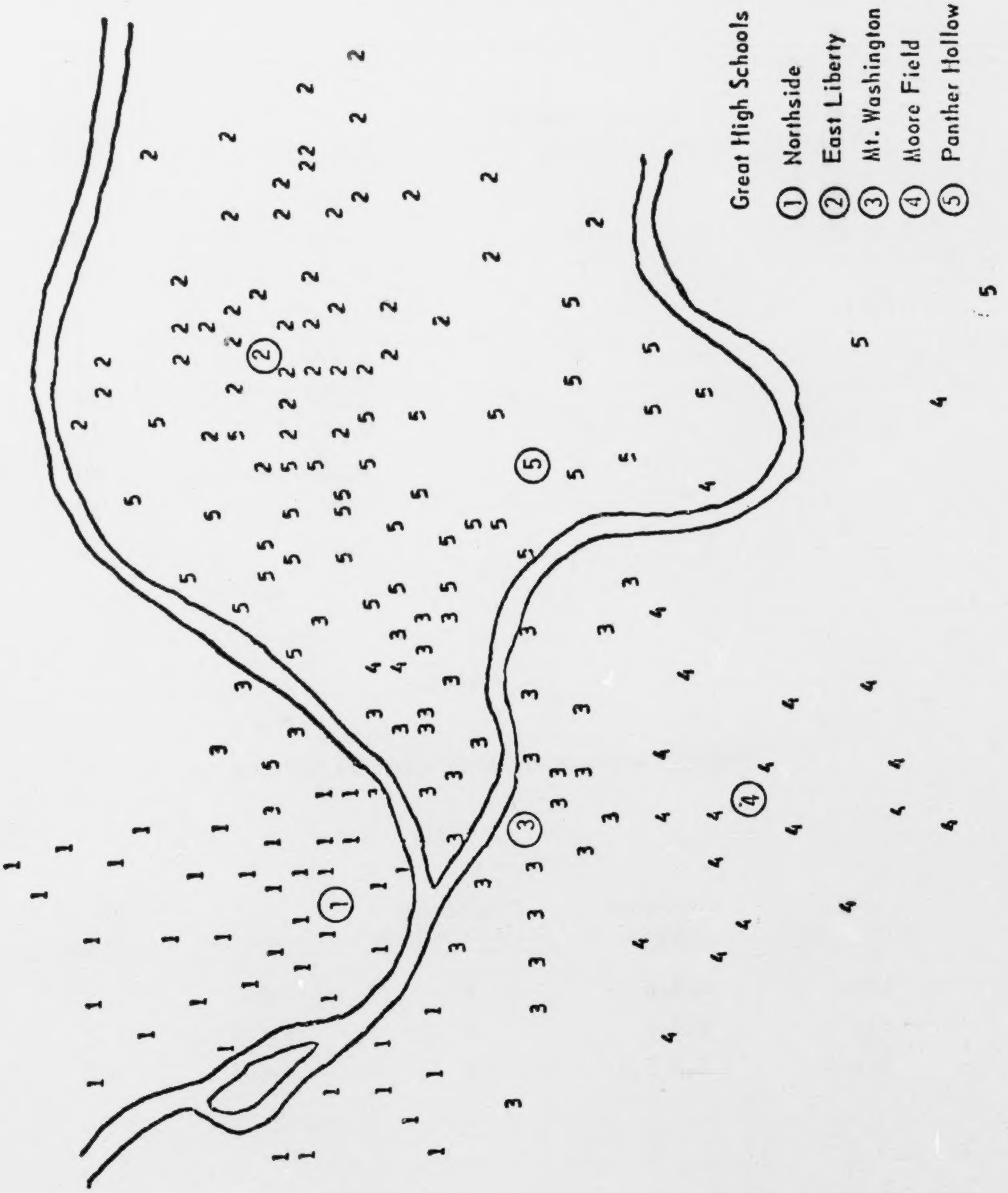

Great High Schools
① Northside
② East Liberty
③ Mt. Washington
④ Moore Field
⑤ Panther Hollow

Table 5

STUDENT INFORMATION BY STUDENT ATTENDANCE AREA

Junior High School	Attendance Area	Enrollment	Percent Negro
Leon	A	1,000	5 %
	B	1,000	5
	C	1,000	0
Bay	D	1,000	5
	E	1,000	5
	F	1,000	10
Grant	G	1,000	75
	H	1,000	50
	I	1,000	50
	J	1,000	75

Table 6

PRESENT INFORMATION BY JUNIOR HIGH SCHOOL

Junior High School	Attendance Area	Neighboring Attendance Areas	Enrollment	Percent Negro
Leon	A,B,C	4	3,000	3 %
Bay	D,E,F	4	3,000	7
Grant	G,H,I,J	4	4,000	63

Figure 3[1]

GEOGRAPHIC LOCATION OF ATTENDANCE AREAS, JUNIOR HIGH SCHOOLS, AND PRESENT SCHOOL DISTRICT BOUNDARIES

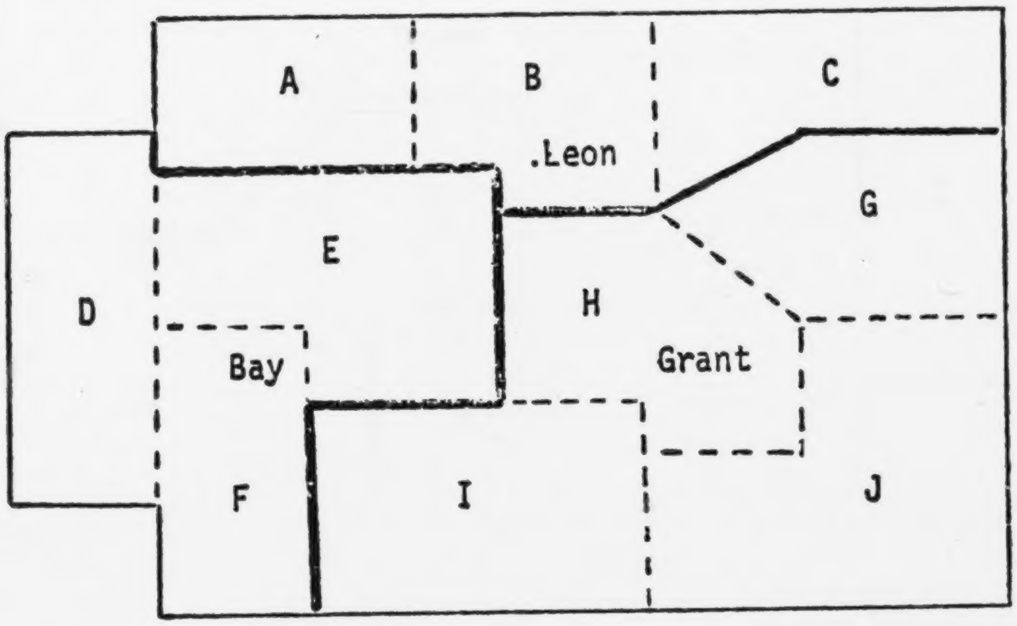


Table 7[2]

EXCHANGE MOVE SUMMARY

Junior High School	Attendance Areas	Neighboring Attendance Areas	Enrollment	Percent Negro
Leon	A,B,C,G	4	4,000	21 %
Bay	D,F,I	3	3,000	21
Grant	E,H,J	7	3,000	43

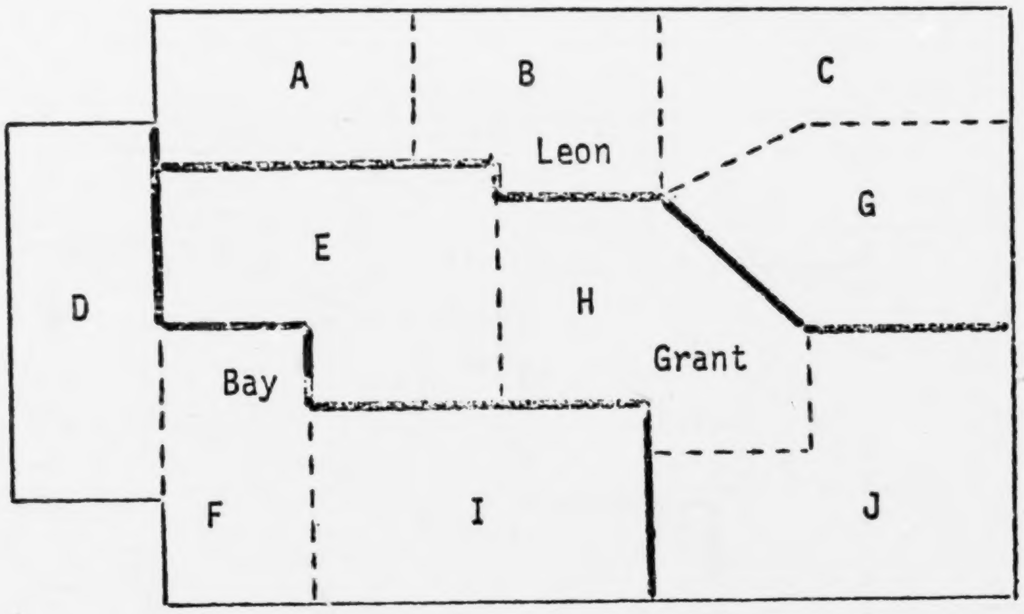
---

[1] *Ibid.*

[2] *Ibid.*, p. 8.

Figure 4[1]

PROPOSED SOLUTION TO CASE STUDY



The implications for the State of Washington are as follows:

1. Such a program might easily be used in this state for redistricting purposes, thus shifting school boundaries and eliminating both the very large and the very small school districts.

2. Use of such a model would also reduce the over-all number of school districts in this state.

Critique: School Reorganization

Considerable evidence—most of it clear and reliable—indicates that further progress will be required by the educational system in the areas of both consolidation and decentralization in the years immediately ahead. Fortunately, as previously described, new and precise tools and techniques are available to aid agencies in accomplishing these goals in a responsible, meaningful manner. The computer, properly programmed, will consider an almost unlimited number of economic-demographic variables and provide a precise map for guidance in either consolidation or decentralization. Now being discussed are annual property valuations accomplished via computer programs in order to provide an up-to-date, equitable assessment of all real property and improvements. The educational system requires no less attention; the job can be done.

In addition, certain accepted policies will now have to be reexamined in the light of new evidence. For example, it has been found that the so-called "size correction" used in New York State's educational funding bears no relationship to cost differentials arising because of school size or sparceness of pupil population.[2] For at least those districts under 1,000—and possibly for those below 1,500-2,000—Francis G. Cornell calls for legislation to speed up consolidation and elimination of unnecessary small districts; special legislation authorizing grants to justifiably small districts ("remote and necessary") on the basis of performance budgets meeting specified criteria; development of a formula correction taking into account unusual social or economic conditions existing in all types of schools.[3]

---

[1] *Ibid.*

[2] Wendell H. Pierce, "The Challenge of Change in School Finance," *The Challenge of Change in School Finance* (Washington, D.C.: National Education Association, 1967), p. 21.

[3] Francis G. Cornell, "Cost Differentials and District Size in State School Aid," *The Challenge of Change in School Finance*, p. 129.

In the final analysis, the state and local communities do have an obligation both to the children in public school and to the taxpayers supporting the system. Credibility and effectiveness can only be maintained by the system so long as the resouces are used wisely and common sense prevails over emotion. The task is neither easy nor impossible. The task is ours to meet.

SPECIAL EDUCATION PROGRAM

IN THE STATE OF WASHINGTON:

REVIEW AND RECOMMENDATIONS

SPECIAL EDUCATION PROGRAM
IN THE STATE OF WASHINGTON:

REVIEW AND RECOMMENDATIONS

Goals of Special Education

The objective of a special education program, *i.e.*, an education program for handicapped children, is basically no different from that for the regular school program. The objective is founded upon recognizing the worth and dignity of each individual, and it can be simply stated: to help each pupil to become a worthy and useful citizen. Therefore, special education must be considered an integral part of the general education sequence. Children who deviate from the normal child in physical, mental, social, or emotional characteristics or abilities require specialized programs to enable them to attain the maximum of their potential. Thus the goal of special education programs is to support and facilitate the handicapped child in his educational and social development. To accomplish this goal, special education can be described as an adjustment of materials, facilities, and techniques of instruction which meet the needs of pupils whose handicaps make it difficult for them to benefit from a regular school program.

Approach Used in This Study

Each school district providing special education services in the State of Washington estimates the services and costs thereof for the coming school year. A state-wide summary of these data gives the nature and extent of special education services provided and the associated costs. Data on the special education program in the State of Washington were obtained from the Office of State Superintendent of Public Instruction. The data for the 1969-70 school year are reviewed and analyzed to derive some program costs. Data are not available to break down the cost elements further. The only meaningful way to analyze the special education programs in more detail would be to treat each handicapping condition as a program in itself. The large number of handicapping conditions covered in special education would make this sort of analysis too unwieldy relative to the purpose of this study.

The data accumulated to compile this report were neither extensive nor exhaustive. The principal sources were the Special Education Department and the Division of Finance and Administration, both of which are part of the State Office of the Superintendent of Public Instruction.

Review of Data Collected

The categorization of handicap is currently delineated as physically handicapped, mentally retarded, and emotionally maladjusted. The first two of these categories are further differentiated. The breakdown of these categories, characterization of each, and enrollments for the school year 1969-70 are given in Table 1. As seen from these data, there were 18,734 pupils enrolled in the total program; the majority of these (approximately 60 percent) were mentally retarded. The further breakdown of these enrollments in terms of age groups, full-time equivalent pupils, and number of classes is given in Table 2. The next-to-last column of Table 2, titled "EST. AVE. FTE," is the estimated average full-time equivalent student, a term defined in the footnote to Table 2. This number is approximately 20 percent smaller than the total number of students served. It is on the basis of this parameter that special education funds are estimated and allocated in the State of Washington.

The number of pupils receiving specialized services in both special classes and regular classes is shown in Table 3. Specialized services are those services provided by specially trained and sometimes certified or licensed professional personnel. These services support and supplement the special education program of the employing school district and also serve the total enrollment of the employing district or cooperating district. When the personnel supplying their services are full-time in the special education program, they are referred to as supportive personnel. When the total school population receives their services, they are called itinerant personnel. The ratio of handicapped students to total school population is roughly 2 percent; the last column of Table 3 indicates that the ratio of handicapped to regular students requiring special services far exceeds that figure. On the average, approximately 82 percent (15,290 of 18,734) of handicapped pupils receive some sort of specialized service, as compared with 12 percent (100,000 of 800,000) of the regular students. As one might expect, the data indicate that the special education program uses the services of physical and occupational therapists extensively.

Table 1

CATEGORIZATION AND CHARACTERIZATION OF HANDICAPPING CONDITIONS IN WASHINGTON'S SPECIAL EDUCATION PROGRAM AND NUMBER OF PUPILS ENROLLED IN 1969-70

Category	Characterization[1]	Number of Pupils		Percent of Total
A. Physically Handicapped	Sensory, motor, neurological, or other physical limitations so severe as to require special class placement.	5,201		27.7 %
1. Hard of hearing			267	
2 Deaf			274	
3. Partially seeing			106	
4. Blind			86	
5. Orthopedically handicapped			558	
6. Neurologically impaired			802	
7. Other (e.g., learning/language disability)			3,108	
B. Mentally Retarded	Retarded intellectual, social, or motor development.	11,015		58.9
1. Trainable			1,455	
2. Educable			9,560	
C. Emotionally Maladjusted	Chronic inappropriate behavior to the degree which requires modification in facilities, personnel, curriculum and management techniques.	2,518		13.4
TOTAL		18,734		

---

[1] *Special Education Handbook for School Administrators 1970*, (Olympia: Office of the State Superintendent of Public Instruction).

Table 2

NUMBER OF PUPILS ENROLLED IN SPECIAL CLASSES IN 1969-70

Type of Handicap	Preschool and Kdg.	Elem.	Jr. High	Sr. High	Total	Est. Avg. FTE[1]	No. of Classes
Mentally Retarded (51-75 I.Q.)	198	4,507	3,021	1,834	9,560	8,572	730
Mentally Retarded (50 I.Q.)	13	1,055	230	157	1,455	1,289	119
Visually Impaired		58	12	36	106	99	9
Blind	8	47	21	10	86	79	8
Hard of Hearing	47	161	20	39	267	245	33
Deaf	111	104	47	12	274	239	44
Emotionally Maladjusted	3	1,192	684	639	2,518	2,126	181
Orthopedically Impaired	50	380	57	71	558	503	49
Neurogically Impaired	8	516	160	118	802	781	65
Other	66	1,118	964	960	3,108	1,374	122
Total	504	9,138	5,216	3,876	18,734	15,306	1,360

[1] FTE = Full-time equivalent which is the number of hours a pupil spends in a special class divided by the number of hours in a full school day. As an example, if four hour days are full days for some pupils for enrollment reporting and apportionment purposes, FTE enrollment of pupils spending part of the day in a special class should then be computed by dividing the number of hours a pupil spends in a special class by 4.

Table 3

NUMBER OF PUPILS RECEIVING SPECIALIZED SERVICES
IN 1969-70

	Special Classes	Regular Classes	Total Pupils	Percent of Special to Total
Speech/Hearing	3,929	41,113	45,778	9 %
Psychological Service	6,519	25,081	32,901	26
Physical Therapy	376	43	419	90
Occupational Therapy	304	62	436	69
Other	4,092	22,746	26,788	15
Total	15,290	89,135	106,322	
Estimated number of pupils to receive home/hospital instruction.			1,683	

The number of FTE students enrolled in special classes and receiving itinerant services for the 1969-70 school year are shown in Table 4. Also listed are the estimated number of students on waiting lists.[1] These data show that 15,306 FTE students are enrolled in special classes, and 7,974 receive itinerant services, for a total FTE of 23,280. Likewise, an estimated FTE of 3,969 (*i.e.*, 3,190 special classes + 779 itinerant services) represent needs which are unmet because the students are on waiting lists. Therefore, these data show that only 85 percent of the eligible handicapped children in the state received services in the 1969-70 school year.

The estimated total cost in providing special-education services for 1969-70 are given in Table 5, along with the estimated costs for unmet needs. These figures indicate that the program met approximately 81 percent of the estimated financial needs during that school year.

The number of employees receiving salary during the 1969-70 program and the amount paid in salaries are given in Table 6. The expenditures in salaries for the program is roughly 86 percent of the total cost of the program, and about 85 percent of the amount expended for salaries is for certified personnel. Data which give a further breakdown of the total expenditures for 1969-70 are given in Appendix B.

Analysis of Data Collected

The total number of estimated average full-time equivalent pupils enrolled in special classes for 1969-70 was 15,306 (Table 2 or 4). The total program and excess costs for maintaining a special education program in the State of Washington are shown in Table 5 as $29,201,523 and $21,178,280 for services provided during 1969-70. Dividing these costs by the special class FTE[2] yields per-FTE-pupil costs of $1,908 for total program cost and $1,384 for excess cost. Likewise, these costs revised to include unmet needs (last column of Table 5) and again divided by 15,306 FTE yield $2,300 and $1,710 for total program and excess costs per FTE pupil, respectively. The figures thus derived can serve as a fiscal base in arriving at recommended programs.

In Table 6, the estimated full-time equivalent employees are shown along with salary amounts for 1969-70. The number of classroom teachers shown is 1,385 FTE. Since there were 15,306 FTE pupils and 1,385 FTE classroom teachers, a ratio of 11 pupils to one teacher represents an average for all handicapping conditions.

Values suggested by educators as desirable student-to-teacher ratios are shown in Table 7 for each handicapping condition. Data are not available on the actual assignments of classroom teachers throughout the state. Proceeding in a very elementary manner, a figure for the number of teachers per handicap class is derived by dividing the number of pupils tabulated in Table 1 by the suggested ratios in Table 7. These figures are shown in the Table 7 column titled "Inferred Number of Teachers," and their total is seen to be 1,596. Compared with the 1,382 FTE classroom teachers utilized in 1969-70, this indicates a difference of 214 teachers.

Similarly, the data in Table 2 on the number of pupils and the number of classes are used to infer the number of pupils per class by type of handicap. These figures are shown in Table 8 along with class loads for special classes that are suggested in the *Special Education Handbook for School Administrators 1970*. The values, inferred from the data in Table 2, are either near the upper limit or outside the upper limit suggested by the educators.

The number of FTE pupils on waiting lists was shown in Table 4, above. The actual number of pupils, estimated number of additional classrooms, and number of FTE staff needed to meet these unmet needs are identified in Table 9. The average salary for FTE certified personnel is obtained from the data in Table 6 by dividing the total salaries ($21,120,940) by the total FTE (2,128); the average is $9,925 per FTE certified staff person. Since 424 such persons are needed, the total cost of their salaries would be $4,208,200.

Since $21,120,940 of the total budget is for salaries of certified personnel, it seems reasonable to assume that the balance of the costs, which is $8,080,583, can be related to the number of classrooms (1,360 as shown in Table 2). Thus, the cost-per-classroom is $5,942. The number of additional classrooms needed is estimated at 291 in Table 9. Using these figures, a value of $1,729,100 is arrived at for unmet classroom needs. This combined with the salaries needed for additional personnel makes the

---

[1] These students are on waiting lists primarily because of lack of facilities, programs, etc.

[2] Note: 15,306 does not include FTE Itinerant Services. The rationale used by the author in using FTE special class rather than FTE special plus itinerant is that the former represents the actual number of full time equivalent pupil and this is the figure appropriate for preserving consistency in the study by the Temporary Special Levy Study Commission.

total cost of meeting the unmet needs $5,937,100. This figure is based upon a very rudimentary analysis and falls within 6 percent of the total estimated in Table 5.

In summary, the results of all analyses made indicate that the special education program is failing to meet the existing need. However, it should be recognized that this analysis represents a very grossly simplified approach to making an assessment of the special education program in the State of Washington. The actual costs for services are very dependent on the handicapping condition. As an illustration, data from one district on the excess cost for educable mentally retarded pupils is $395 per FTE, whereas it is $1,246 per FTE for deaf pupils. Other variables exist, such as the experience and training of the teacher (reflected through salaries) and required facilities and equipment, which can significantly perturb the average-values arrived at in the above analysis.

Table 4

PUPIL FTE SERVED AND PUPIL FTE ON WAITING LISTS

IN 1969-70 SPECIAL EDUCATION PROGRAM

	Served FTE	Waiting List FTE	Total FTE Needs
Special Classes			
Educable Mentally Retarded	8,572	917	9,489
Trainable Mentally Retarded	1,289	176	1,465
Visually Impaired	99	21	120
Blind	79	7	86
Hard of Hearing	245	69	314
Deaf	239	7	246
Emotionally Maladjusted	2,126	1,380	3,506
Orthopedically Impaired	503	41	544
Neurogically Impaired	780	107	887
Other	1,374	465	1,839
Special Classes Sub-Total	15,306	3,190	18,496
Itinerant Services			
Speech/Hearing Therapy	3,433	366	3,799
Psychological Services	2,468	273	2,741
Physical Therapy	31	11	44
Occupational Therapy	33	12	45
Other	2,009	117	2,126
Itinerant Services Sub-Total	7,974	779	8,753
State Totals–FTE	23,280	3,969	27,249
Special Classes and Itinerant Services			

Table 5

ESTIMATED TOTAL COSTS AND UNMET NEEDS

1969-70 SPECIAL EDUCATION PROGRAM

	Services Provided	Unmet Needs	Total
Total Estimated Cost of Program	$ 29,201,523	$ 6,346,329	$ 35,547,852
Less:			
Estimated Guaranteed Support	7,897,183	1,372,800	9,269,983
Estimated Other Non Local Receipts	126,060	- 0 -	126,060
Excess Costs	$ 21,178,280	$ 4,973,529	$ 26,151,809

Table 6

NUMBER OF FULL-TIME EQUIVALENT EMPLOYEES AND SALARIES PAID

1969-70 SPECIAL EDUCATION PROGRAMS

Certificated Personnel	Est. FTE	Est. Salaries	Classified Personnel	Est. FTE	Est. Salaries
Classroom Teachers	1,385	$12,922,611	Clerical	162	$ 811,052
Speech/Hearing Therapists	301	2,683,321	Attendants, Aides	286	985,767
Psychologists	157	1,840,749	Physical Therapists	16	145,392
Directors	51	808,417	Occupational Therapists	15	142,178
Principals	44	641,008	Other	218	1,385,051
Others	190	2,224,832		68	421,215
Total	$ 2,128	$ 21,120,940	Total	765	$ 3,890,655

Total Salaries	$ 25,011,965
Total Cost of Special Education Program	$ 29,201,523

Table 7

STUDENT-TEACHER RATIOS FOR SPECIAL CLASSES

BY TYPE OF HANDICAP

	Type of Handicap		Suggested Ratio[1]	Inferred Number of Teachers
1.	Educable Mentally Retarded		15/1	637
2.	Trainable Mentally Retarded		10/1	146
3.	Hard of Hearing		8/1	33
4.	Deaf		8/1	34
5.	Partially Seeing		12/1	9
6.	Blind		10/1	9
7.	Orthopedically Handicapped		6/1	93
8.	Neurologically Impaired		8/1	100
9.	Emotionally Disturbed		10/1	252
10.	Other	Assume the average of	11/1	283
	Total			1,596

---

[1] *Special Education Handbook for School Administrators.*

Table 8

THE NUMBER OF PUPILS IN A CLASS

BY TYPE OF HANDICAP

Type of Handicap	Number Inferred from Date in Table 2	Suggested Load for a Special Class[1]
1. Educable Mentally Retarded	13	6-16
2. Trainable Mentally Retarded	12	6-10
3. Hard of Hearing	11	6-8
4. Deaf	6	4-8
5. Partially Seeing	12	6-12
6. Blind	11	6-10
7. Orthopedically Handicapped	11	4
8. Neurologically Impaired	12	4-8
9. Emotionally Disturbed	14	
10. Other		

---

[1] *Special Education Handbook for School Administrators 1970.* (See Sources of Information.)

Table 9

ACTUAL NUMBER OF HANDICAPPED PUPILS ON WAITING LIST IN 1969-70

Special Classes Type of Handicap	Pre-School and Kdg.	Elem.	Jr. High	Sr. High	Total
1. Mentally Retarded (I.Q. 51 - 75)	43	574	243	162	1,019
2. Mentally Retarded (I.Q. 50 or below)	21	106	37	28	196
3. Visually Impaired	1	5	3	14	23
4. Blind	5	1			8
5. Hard of Hearing	9	37	11	18	75
6. Deaf	6	1	1		8
7. Socially Maladjusted	2	145	142	141	430
8. Emotionally Maladjusted	12	723	295	183	1,213
9. Orthopedically Impaired	3	28	10	5	46
10. Neurologically Impaired	9	69	23	9	110
11. Other	25	698	182	152	1,057
Total	136	7,387	947	712	4,185
No. of Additional Classrooms					291

For Itinerant Services Type of Service	No. of Pupils
1. Speech/Hearing Therapy	4,881
2. Psychological Service	3,642
3. Resource Rooms	453
4. Home/Hospital Instr.	104
5. Physical Therapy	148
6. Occupational Therapy	165
7. Other	995
Total	9,615

Number of FTE Certificated Staff Needed to Provide Additional Service	
1. Teachers	274.65
2. Speech/Hearing Therapists	49.05
3. Psychologists	41.75
4. Directors	8.62
5. Principals	3.46
6. Other	45.70
Total	423.68

Recommendations

The author recommends that the Special-Education Program be included in the apportionment formula. Therefore, minimum, base, and ideal programs are estimated and presented in Table 10.

1. **Minimum Program**
   It appears that the 1969-70 program is a minimum program since it met only about 81 percent of the total estimated need. The costs per pupil which should be utilized to represent this program are $1,908 for total program costs or $1,384 for excess costs.
2. **Base Program**
   The base program is postulated as simply adding service sufficient for those on the waiting lists. The figures for per-pupil costs to meet this need were estimated in the previous section and came to $1,922 per FTE and $1,414 per FTE for total program and excess costs, respectively.
3. **Ideal Program**
   The analysis made above on student-teacher ratios and number of pupils in classes indicates that the minimum and base programs would probably still be deficient in terms of the guidelines suggested by educators in the field.

   The analysis showed that the program is deficient by 211 classroom teachers. If the ideal ratio of teachers to students per class is to be maintained, additional classrooms are needed. Using the average value of 11 pupils to one teacher per class then perhaps 19 additional classrooms would be required. Using values of $9,330 per FTE classroom teacher (derived from Table 6) and $5,942 per classroom, the total cost of adding 211 teachers and 19 classrooms is roughly $2,081,530. Therefore, the added cost per FTE pupil is this figure divided by the total number of FTE pupils (15,306), or $122. Adding this incremental cost to the base program cost yields a net total program cost of $2,044 per FTE. Using a scaling factor of 0.74 between total program and excess costs yields an excess cost per FTE pupil of $1,513.

Table 10

SUMMARY OF RECOMMENDED

PER-PUPIL COSTS

BY PROGRAM

	Cost Per FTE Pupil	
Program	Total	Excess
Minimum	$ 1,910	$ 1,380
Base	2,300	1,710
Ideal	2,430	1,800

APPENDICES

Appendix A

SOURCES OF INFORMATION

Listed below are persons who contributed information utilized in this report. Their contributions are gratefully acknowledged. Also listed are the reports from which information was gleaned. The inferences drawn from any information obtained from these sources are, however, solely the author's.

Wilbert Gilbert
Division of Finance and Administration
State Office of Public Instruction
Olympia, Washington

John Mattson
Director of Special Education
State Office of Public Instruction
Olympia, Washington

Lois Nyland
Division of Finance and Administration
State Office of Public Instruction
Olympia, Washington

Dale Moberg
Director, Tri-Cities Area Special Education Department
Richland Public School District
Richland, Washington

George Kontos
Consultant, Education Technology
Battelle-Northwest
Richland, Washington

Special Education Handbook for School Administrators 1970. Olympia, Washington: Office of the State Superintendent of Public Instruction.

Benton-Franklin County Comprehensive Analysis for Mental Retardation Planning 1969. Benton-Franklin Mental Health and Mental Retardation Planning Board.

Special Education Year Book for 1968-1969, Seattle Public Schools.

464

Appendix B

ADDITIONAL INFORMATION

A breakdown of the costs for the special education program in 1969-70 is shown in terms of object and function in Table 1, following. The percent value above the dollar figure is the cost percentage by object, and the percent value below the dollar figure is the cost percentage by function. It is seen that the major cost item per object is salaries; the largest percentage is instructional salary costs.

A random selection was made to obtain estimated data filed on Form HC-R/SD at the state office from school districts of varying sizes for the school year 1970-71. Six school districts were chosen to bracket a range of school-district sizes. A comparison of the costs for special classes and total services for these districts is shown in Table 2. The first two columns give the estimated number of FTE pupils enrolled in special classes and the estimated average FTE pupils who receive itinerant services. Column three is the sum of these. Column four gives the estimated total program costs per FTE; column five, the excess cost per FTE for special classes. The excess costs per FTE range from $451 to $1,084. The total excess program cost, including itinerant services, is given in column six. The last column of numbers in Table 2 is the adjusted excess cost per total FTE, or the ratio of column six to column one. Here, the cost per FTE is seen to range from $996 to $1,871, which compares with the state-wide average for 1969-70 of $1,380 for the services provided in that year.

Table 1

ESTIMATED TWELVE-MONTH EXPENDITURES IN PROGRAM FOR THE HANDICAPPED 1969-70

OBJECT / FUNCTION	10 ADMIN.	20 INSTRUCTION	30 PUPIL SERVICES	60 OPERATION OF PLANT	70 MAINT. OF PLANT	LINE TOTALS 10 - 70
1 CERTIFICATED SALARIES	2.20% $463,118.92 46.79%	83.57% $17,631,252.87 79.86%	14.22% $3,000,345.13 80.70%	0.01% $1,465.00 0.08%	0.01% $1,475.00 0.23%	100.00% $21,097,656.92 72.25%
2 PROFESSIONAL & TECH. SALARIES	12.56% $92,155.16 9.31%	58.45% $429,009.87 1.94%	15.76% $115,696.06 3.11%	8.30% $60,924.49 3.42%	4.93% $36,220.23 5.69%	100.00% $734,005.81 2.51%
3 SECRETARIAL, CLERICAL, OTHER SALARIES & WAGES	7.29% $236,550.54 23.90%	48.63% $1,577,003.86 7.14%	6.11% $198,005.86 5.33%	30.45% $987,608.35 55.50%	7.52% $244,005.95 38.30%	100.00% $3,243,174.56 11.11%
4 EMPLOYEE BENEFITS	3.40% $48,504.31 4.90%	75.66% $1,080,446.90 4.89%	10.56% $150,760.21 4.05%	8.14% $116,168.56 6.53%	2.25% $32,079.50 5.04%	100.00% $1,427,959.48 4.89%
5 SUPPLIES & MATERIALS	5.44% $37,005.95 3.74%	58.36% $396,915.98 1.80%	6.42% $43,652.85 1.17%	16.31% $110,964.37 6.24%	13.47% $91,628.00 14.38%	100.00% $680,167.15 2.33%
6 BOOKS	0.24% $518.86 0.05%	98.98% $212,556.59 0.96%	0.76% $1,628.72 0.04%	0.02% $35.00 0.00%	0.00% $0.00 0.00%	100.00% $214,739.17 0.74%
7 CONTRACTUAL SERVICES	8.56% $76,312.16 7.71%	15.11% $134,726.04 0.61%	9.67% $86,253.09 2.32%	48.46% $432,134.91 24.28%	18.21% $162,352.09 25.48%	100.00% $891,778.29 3.05%
8 TRAVEL & COMMUNICATIONS	7.07% $22,783.11 2.30%	49.67% $159,997.19 0.72%	26.17% $84,293.92 2.27%	15.49% $49,908.21 2.80%	1.59% $5,112.88 0.80%	100.00% $322,095.31 1.10%
9 CAPITAL OUTLAY (NEW SPECIAL EQUIPMENT)	2.19% $12,910.17 1.30%	77.16% $455,181.75 2.06%	6.32% $37,283.79 1.00%	3.45% $20,357.22 1.14%	10.88% $64,213.71 10.08%	100.00% $589,946.64 2.02%
COLUMN TOTALS	3.39% $989,859.18 100.00%	75.60% $22,077,091.05 100.00%	12.73% $3,717,919.63 100.00%	6.09% $1,779,566.11 100.00%	2.18% $637,087.36 100.00%	100.00% $29,201,523.33 100.00%

Table 2

COMPARISON OF COSTS

BY SCHOOL DISTRICTS OF DIFFERING SIZE

Special Classes	Itinerant	Total	Special Class Cost/FTE Total	Special Class Cost/FTE Excess	Total Excess Cost (Includes Itinerant Services) Adjusted Excess	Ratio of Total Excess Cost to Special Class FTE
2,861	525	3,386	$ 1,610	$ 674	$ 3,975,671	1,390
425	27	452	1,944	1,084	795,240	1,871
292	17	309	1,343	643	362,591	1,242
387	30	417	1,186	451	469,592	1,213
18	0	18	1,366	909	25,536	1,419
23	0	23	1,196	528	22,903	996

SPECIAL EDUCATION PROGRAMS FOR INDIAN CHILDREN:

RECOMMENDATIONS & ESTIMATED COSTS

470/471

SPECIAL EDUCATION PROGRAMS FOR INDIAN CHILDREN: RECOMMENDATIONS AND ESTIMATED COSTS

Introduction

This report deals with one of the tasks performed in a study being conducted by Battelle-Northwest for the Washington State Temporary Special Levy Study Commission. The Battelle phase of the Levy Study deals with the programs and financial needs of the state's public schools, and specifically with 1) determining the educational programs that are common among school districts, 2) determining the variations in cost among these programs, and 3) developing and using a cost model to simulate the effects of alternative approaches in funding schools.

In any consideration of the costs of providing full opportunity for a basic education for each child, it must be acknowledged that special problems exist which place some students in a disadvantaged position relative to the majority. Such situations clearly create differences in the cost per child. Public educational policy is committed to the philosophy that special helps or compensatory measures be applied to help give "disadvantaged" children the same opportunities as their neighbors in achieving the main goals of American education. These goals were stated by John W. Gardner as "individual self-fulfillment, preparation for citizenship, preparation for the 'world of work,' and participation in the American mainstream--in his own style and to his own limit."[1]

School districts can receive Federal and state funds through several programs designed to improve the education of disadvantaged children. The most common target groups are the physically and mentally handicapped, urban disadvantaged, Indian and migrant children. However, the level of funding now available is insufficient either to support all of the programs needed or to provide them to all of the children in the state who require them.

This report deals with programs for Indian children in the public schools of Washington State. The special programs widely considered to be most beneficial and necessary for Indian children are briefly described, their costs are estimated, and the total cost per pupil is estimated for each of several clusters of programs considered to range from a minimum basic to a complete or exemplary program.

General Approach

The special or compensatory programs and their costs were obtained by consolidating the data and recommendations from state and Federal reports and other literature on Indian education and from resource persons contacted in the course of this study. The list of resource persons is attached to this report. It includes state education and local school district officials, specialists and consultants from the State Office of Public Instruction and from the state's colleges, and Indians in Washington State who have been concerned with education.

From the information received from all sources, program priorities and cost estimates were derived as objectively as seemed possible from the variety of opinions expressed by the resource persons. Program cost estimates from several sources were usually in close agreement and average or median values could be confidently chosen. Ranges beyond 25 percent could usually be explained by real program differences. Program priorities were established by consolidating recommendations received, noting both how often each program was cited and the order of priorities assigned by the resource person. Weighting factors were applied, giving greatest weight to the programs given the highest priorities; a rank was thus obtained. The program rankings by Indians were not the same as those by school officials and educators, and this is noted in the text.

Because of time restrictions, not all of the desirable sources of information nor resource persons could be consulted. Most inquiries were made by telephone, and in some cases mailed responses and personal visits followed.

Programs Investigated

Most of the programs specifically for Indian students in the public schools are supported by Federal Johnson-O'Malley Act funds administered by the State Office of Public Instruction. Additional funding for Indian programs has been provided in the past few years through state Urban, Racial, Rural, and Disadvantaged (URRD) sources. Both Johnson-O'Malley and URRD grants are awarded competitively (that is, not automatically on a "per-Indian-student" basis) for specific program proposals.

---

[1] The Report of the President's Commission on National Goals, "Goals for Americans," (Englewood Cliffs: Prentice-Hall, 1960), p. 81.

A variety of programs are carried out in the state, varying considerably in emphasis from district to district. Not surprisingly, most resource persons emphasized one or more of the kinds of programs already being applied to some degree in at least some school districts. New programs not already on the "list" were rarely suggested.

The programs most often recommended are listed in order of priority in Table 1. Each program is more fully described in the following paragraphs.

1. **School-Home Liaison.** Indians from the local community are employed to work as home visitation aides for the school. Their purpose is to improve communications between the home and the school and to influence family interest and student motivation. They achieve these goals by interpreting the school policies and programs for the family and by explaining the circumstances in the home and the community to the staff of the school. It is essential that the aides know the community, are well accepted in the homes, are able to be impartial, and carefully respect confidences.
2. **Remedial Programs.** These programs may be carried on throughout K-12, but they emphasize reading, mathematics, and other basic skills in the elementary school years. They should be provided for the students at as early an age as possible and as soon as a difficulty is detected. The programs may involve individualized instruction by remedial reading specialists and other professionals, summer schools, tutoring, and introduction of methods or media better suited to the interests and needs of the disadvantaged group.
3. **Early Childhood Education.** Emphasis is on preschool preparation, usually through a "Headstart" program or its equivalent. Present indications are that special motor and conceptual skill development efforts should be continued at least three more years for most disadvantaged children. A program similar to "Follow-Through" may meet this need.[1]
4. **Teacher Aides.** Indians from the local community are employed as teacher aides. An aide works in the classroom, under the direction of the teacher, helping individual students and small groups in drill, recitation, testing, etc. Direct contact with the children is important. A teacher aide program is normally used in the lower grades, but may be effectively extended into junior high school if persons competent in the subjects are available.
5. **Teacher Training.** Summer institutes, workshops, and in-service training programs are used to help the teachers learn the history of American Indians; to learn the cultures and life styles of Pacific Northwest Indians, and particularly of the tribes or bands represented in the district; to become sensitive to the cultural backgrounds and value systems of their children; and to dispel the various misconceptions and clichés about Indians that most white Americans have "inherited." The training may also cover techniques and curriculum programs more suited to the Indian children, but these programs must be accompanied by development of an increased understanding of the relevant history and culture for which the programs are designed. The need for such teacher training programs will diminish if a substantial percentage of the professional staff in the schools is Indian.
6. **Enrichment of the Curriculum.** Most of the suggested curriculum revisions fall into three categories:
    a. Revision of the social studies and language arts curriculum to make substantial additions of American Indian anthropology, history and culture, and the history of conflicts between Indians and the American settlers and the U. S. government.
    b. Addition of curriculum found to be particularly relevant to the Indian students, such as Indian languages, art and craft forms, music, dancing, and games (taught by local Indian adults when possible).
    c. Expansion or addition of vocational education programs that are found to be attractive to the Indian youth.

---

[1] **Follow Through is basically a post-Headstart program, blending Headstart instructional techniques into the usual K-2 school curriculum. It involves a small class load per teacher, planned parent participation, a home-school aide who works in the classroom and also with the parents in their homes, and a supplemental health and nutrition program.**

7. **School Counselors.** Expanded professional counseling services, including vocational counseling. Obviously, the counselor must be sensitive to Indian concerns and able to reach out to the problem student.
8. **Health Services.** Public health nurses' and part-time physicians' services are provided to give each child a thorough physical examination and maintain much closer surveillance over the health of the children than is normal in school programs.
9. **Food Services.** Johnson-O'Malley funds have been used by some districts to pay for free or reduced-price lunches for Indian children. Breakfast or a snack has also been provided in some cases. The Department of Agriculture subsidizes free lunch programs for all low-income children who apply, and Johnson-O'Malley funds may no longer be used for this purpose.

Table 1

PROGRAMS RECOMMENDED MOST FREQUENTLY BY RESOURCE PERSONS

(In descending order of priority)

1. School-home liaison.
2. Remedial programs for basic skills (summer school, tutoring, etc).
3. Early childhood education (*e.g.*, Headstart).
4. Use of teacher aides who are members of the Indian community.
5. Teacher training (especially for cultural awareness and history of the people).
6. Enrichment of the curriculum.
7. School counselors.
8. Health services.
9. Food services.

Note: Resource persons who are Indian cited "teacher training" (item 5) and utilization of teacher aides (item 4) more frequently than the group as a whole. These items appeared to rank third and fourth in importance to them while the other programs ranked essentially in the order they appear above.

Present Funding

Most of the above programs are presently funded to some degree from Federal and state sources. Johnson-O'Malley funding levels to Washington State were $229,350 in 1968-69, and $560,000 in 1969-70. About 75 percent of the funds have been allocated directly to school districts for approved programs,[1] and the remainder supported teacher training contracts, instructional materials, development projects, and administration. Johnson-O'Malley funds are granted only to those districts that are on or near Indian trust land and that have a "significant" number of Indian students. Therefore, the funds tend to supplement the Federal Impact (PL-874) payments. The state URRD funds are not so restricted and URRD grants are being made to some districts that do not receive JOM funds. State URRD projects for Indians in 1969-70 amounted to $267,000, serving approximately 1,800 Indian students in 10 school districts. The JOM funds served about 4,000 Indian students in 1968-69 and 5,236 in 1969-70 (in 30 school districts) for an average funding level of $80 per Indian student. Since the Indian enrollment in the state was 10,674 in autumn 1969, these programs reached approximately 50 percent of the Indian students in the public schools. The distribution of funds by program in the 1969-70 school year is given in Table 2.

Federal Impact (PL-874) funds allocated to Washington's Johnson-O'Malley schools in 1969-70 totaled $738,000. However, these funds are normally included in regular operating budgets and cannot be linked to educational programs for any particular group of students (educational disadvantage is not a criterion for PL-874 funding).

Goals of a Model Program

A special program for Indian students in public schools should be able to meet the following goals:

1. Developing and maintaining the students' learning rate so that the average achievement of Indian students at least equals that of the average student of the same age.

2. Giving a prominent place to the history and culture of American Indians at least in those schools that have Indian students.

3. Building a positive self-image in Indian youth.

4. Involving Indian parents in planning and carrying out the education program.

5. Providing Indian children with opportunities for multiracial educational experiences.

These goals were drawn mainly from the recommendations presented by the Washington State Joint Legislative Committee on Education in 1968,[2] from the 1969 special subcommittee (The Kennedy Committee) report to the U. S. Senate,[3] and other works.[4]

Program Examples

A balanced program that will meet the variety of individual needs of Indian children throughout their school years will necessarily include several of the programs identified in Table 1.

To meet the goals stated above, it seems imperative that the programs begin in the preschool years and heavily emphasize language and basic skill development during the primary grades.

Of the many possible program alternatives, three examples of programs have been selected that represent three levels of program emphasis. The first is a complete or model program, designed to meet every educational need as it arises. The second is a limited and more modest program, and the third is a minimum basic program. The success of the last in meeting the program goals may be expected to be spotty and very dependent on the abilities of the teachers. Each of these programs is described below and also summarized in Table 3.

---

[1] Currently, Indian parent advisory committees in each district must approve (by signature) the proposed JOM programs before funding can be authorized.

[2] Joint Committee on Education (see Bibliography), pp. 35-39.

[3] U.S. Senate Special Subcommittee on Indian Education.

[4] Bruce Gaarder; Harold Miller; Nancy Luril; Office of Education; and others.

Table 2

FUNDING LEVEL FOR SPECIAL INDIAN PROGRAMS IN WASHINGTON STATE SCHOOL DISTRICTS[1]–1969-70

	JOM	URRD	Title I	Titles II and III
1. Home-School Liaison	$105,000			
2. Remedial Programs				
Regular	36,000	$122,000	$320,500	$27,000
Summer	76,000		29,000	
3. Early Childhood				
Headstart and Day Care[2]		44,000		
Kindergarten	28,000			
Follow-Through		34,000		
4. Teacher Aides	31,000			
5. Teacher Training	25,000			45,000
6. Curriculum Enrichment	24,000	56,000	7,500	
7. Health Services	7,000	11,000		
8. Food Services	25,000			
9. Other (mainly program devel. and planning)	79,000			
Total	$436,000	$267,000	$357,000	$ 72,000

---

[1] Obtained from a program summary by Mrs. Lorraine Misiaszek. The dollar amounts are rounded. In some cases forecast rather than actual expenditures were used.

[2] Not including regular state and federally financed programs. Headstart projects under OEO/HEW are known to serve a few hundred Indians, but enrollments by race are not available. Five all-Indian Headstart programs are operating in the state (directly funded by HEW—Washington, D.C.) serving 150 children in full-year programs and 50 in summer programs. (Funding $136,000.)

Program 1—The Model Program

1. One year of prekindergarten education for every Indian child.
2. Three years (K-2) of a Follow-Through type program for every Indian child and with non-Indian children comprising at least 20 percent of the program enrollment. (The percentage of non-Indian children may include all children eligible for Follow-Through by the usual criterion—poverty—but costs above the 20 percent level would not be identified as Indian program costs.)
3. Teacher aides utilized in grades three to six, with no reduction of ratios of students to professional teachers. (Follow-Through includes aides in K-2.)
4. Home-school liaison serving all Indian children in the district.
5. Compensatory basic skills programs for those showing significant problems and deficiencies. We will assume that 10 percent of the Indian students will need concentrated compensatory help.
6. Curriculum enrichment provided in the secondary school.
7. Expanded counseling services serving Indian students from grades 7 through 12.
8. Institutes or in-service training required for all teachers, principals, and counselors. Professionals will receive at least 60 hours per year of special training or alternatively, an in-service program; paraprofessionals will receive 30 hours per year.
9. Free lunches and breakfast snacks made available to low income Indian children. This assumes an average of 75 percent of the Indian students will participate.
10. Expanded health services provided.

Program 2—A Limited Program

1. One year of prekindergarten education for every Indian child.
2. Teacher aides utilized in grades K-4.
3. Home-school liaison serving all Indian children in the district.
4. Special training required for all teachers, counselors, and principals. They will receive 60 hours per year in workshops or institutes (or alternatively, in an in-service program).
5. Curriculum enrichment for secondary students.
6. Expanded counseling services for grades 7-12 Indian students.
7. Remedial or compensating programs provided for those exhibiting special needs. This assumes 20 percent of the Indian students will need concentrated, special help.
8. Free food services made available for K-6 students.
9. Health services provided for K-6 students.

Program 3—A Basic or Minimum Program

1. One year of prekindergarten education for every Indian child.
2. Teacher aides in K-4.
3. Home-school liaison serving all Indian children in the district.
4. Special in-service or workshop training provided all teachers, counselors, and principals. The training would consist of at least 30 hours per year.
5. Compensatory programs provided for students with special problems. It is assumed that 30 percent of the students will need compensatory instruction.

Table 3

COMPONENTS OF THE THREE PROGRAM EXAMPLES

Program Components	Application		
	Program 1	Program 2	Program 3
1. Home-School Liaison	All Indian children	All Indians	All Indians
2. Remedial Programs for Basic Skill Development	10%of Indian students	20% coverage	30% coverage
3. Early Childhood Education			
Headstart	One year for all Indians	One year	One year
Follow-Through	K-2 for all Indians	--	--
4. Use of Teacher Aides	Grades 3-6*	K-4	K-4
5. Teacher Training Programs	All prof.; 60 hrs All aides; 30 hrs	All prof.; 60 hrs	All prof.; 30 hrs
6. Curriculum Enrichment	Grades 9-12	Grades 9-12	--
7. School Counselors	Grades 7-12	Grades 7-12	--
8. Health Services	All Indians	Grades K-6	--
9. Food Services	All Indians	Grades K-6	--

---

*Teacher aides also included in Follow-Through.

Estimate of Basic Cost

The average or estimated cost for each of the above programs is given in Table 4. The notes attached to the table briefly explain the rationale for those cases in which the cost figure was not simply an average or median of the figures quoted by resource persons.

It should be noted that some of the programs, of their nature, benefit *all* students in the classes, not just the Indian students. This applies to teacher aides and teacher training programs. In order to apply the unit costs in these cases, it is necessary to use the total enrollment figures rather than those just for Indian enrollment.

The unit costs of teacher aide and staff training programs will be markedly affected by the percentage of Indian students in a district; this is because the costs of training personnel remains constant regardless of the number of Indian students in a given class. These per-pupil cost variations are illustrated by the curves in Figures 1 and 2. It is evident that the additional cost per Indian pupil for one teacher aide per classroom, where the ratio of students to professional teacher is kept at 25, becomes greater than the total average educational cost when the percentage of Indian students in the class falls below about 15. When the training programs reach a per-pupil cost in excess of $500 per year, various forms of individual instruction, such as tutoring and other remedial programs, appear to be more attractive from an economic standpoint. At this point, however, difficult questions about the relative effectiveness of each of these types of program must be raised. In addition, the tangible and intangible extra benefits to the families and the community which result from adult Indians' being employed in the schools as participants in the teaching process would need to be factored into the decision.

The teacher training programs also inevitably have high per-pupil costs when the percentage of Indian students is low (see Figure 2). In this case, the point at which remedial programs become conomically attractive is at about 10 percent Indian enrollment. The question of effectiveness must be asked again: "Will a good remedial program compansate for the damage done (especially during the early grades) by an unknowing and insensitive teacher?"

Other alternatives should probably be considered for those cases where the Indian student enrollment is low. The most obvious is to group the Indian children into a few classes and carefully select, or train, particular teachers. In these cases, adult Indian teacher-aides could be assigned to selected classrooms, and the cost of the program in the area below 15 percent Indian enrollment (see Figures 1 and 2) might be reduced by up to a factor of two.

Table 4

AVERAGE COSTS OF SPECIAL EDUCATIONAL PROGRAMS FOR DISADVANTAGED CHILDREN[1]

Program	Cost Per Child[2]
1. Prekindergarten education (Headstart or similar).	$1,000
2. Prekindergarten combined with full-time day care - educational component only (full year program).	400 (Note 1)

---

[1] These costs are in addition to the normal student entitlements.

[2] Costs are annual unless indicated otherwise; 180-day school year assumed.

Table 4–continued

Program	Cost Per Child[1]
3. Follow-Through A post-Headstart program of concentrated remedial education in K-2.	$650 (Note 2)
4. Teacher Aides in kindergarten and primary grades. (Assume class sizes per professional do not change.)	100 (Note 3)
5. Home-School liaison - counseling program	50
6. Compensatory Programs	
a. Remedial reading program	250
b. Tutoring	250 (Note 4)
c. Summer School - 6 weeks	200 (Note 5)
d. Summer School - Camp (full-time counseling and diversified academic, social, and enrichment activities and board).	50/week
7. Counseling.	25 (Note 6)
8. Curriculum enrichment– (Assuming special classes meet 2 or 3 times per week).	40
9. In-Service Teacher and Teacher aide Training.	
a. Training Programs held at colleges or educational centers.	300 per week per participant

---

[1] Costs are annual unless indicated otherwise; 180-day school year assumed.

Table 4–continued

Program	Cost Per Child[1]
b. Workshops– Similar to above, but held in participants school district.	$250 per week per participant
For paraprofessionals.	200 per week
c. In-service training program.	300-600 per trainee
10. Food Services– Breakfast or snack and lunch furnished.	120
11. Health Services.	20

Notes

1. It was assumed that 25 percent of total day-care-Headstart operating costs would be funded as the educational program, as is presently the case in the migrant day-care project (NRO, Pasco).

2. The present Follow-Through projects are funded at about 20 percent more than this figure, but they are new and exemplary programs. Experience should result in a more economical program. The unit cost figure must be applied to the total Follow-Through enrollment, not simply the Indian enrollment.

3. Teacher-aide assignments benefit all students, not just the disadvantaged. Therefore, the costs per pupil is based on total class enrollment (*e.g.*, 25 students).

4. Tutoring costs vary directly with the number of hours of contact. The figure given is based on a two-hours-per-week sustained program.

5. A "remedial" summer program is assumed at about 25 percent higher cost than a normal instructional program of this duration.

6. A student-counselor ratio of about one half the normally advised load is assumed. The cost figure represents one half of the counselor's salary.

7. Staff training programs benefit all students, whether disadvantaged or not. Consequently, when a training program is costed on a per-student basis, the whole teaching load (*e.g.*, 25 students) is counted.

---

[1] Costs are annual unless indicated otherwise; 180-day school year assumed.

Figure 1

ESTIMATED COST PER INDIAN STUDENT FOR TEACHER AIDES
AS A FUNCTION OF PERCENT INDIAN ENROLLMENT

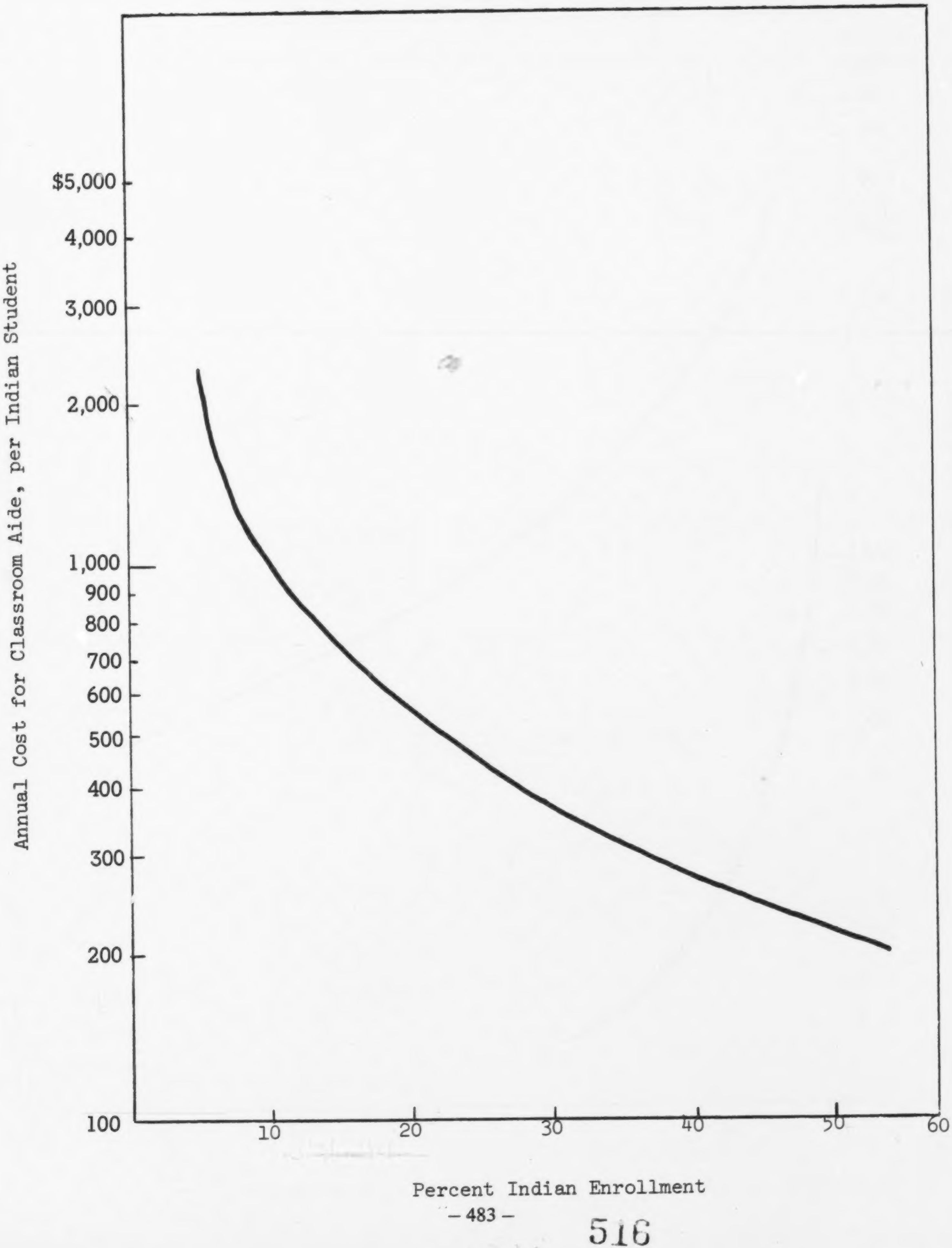
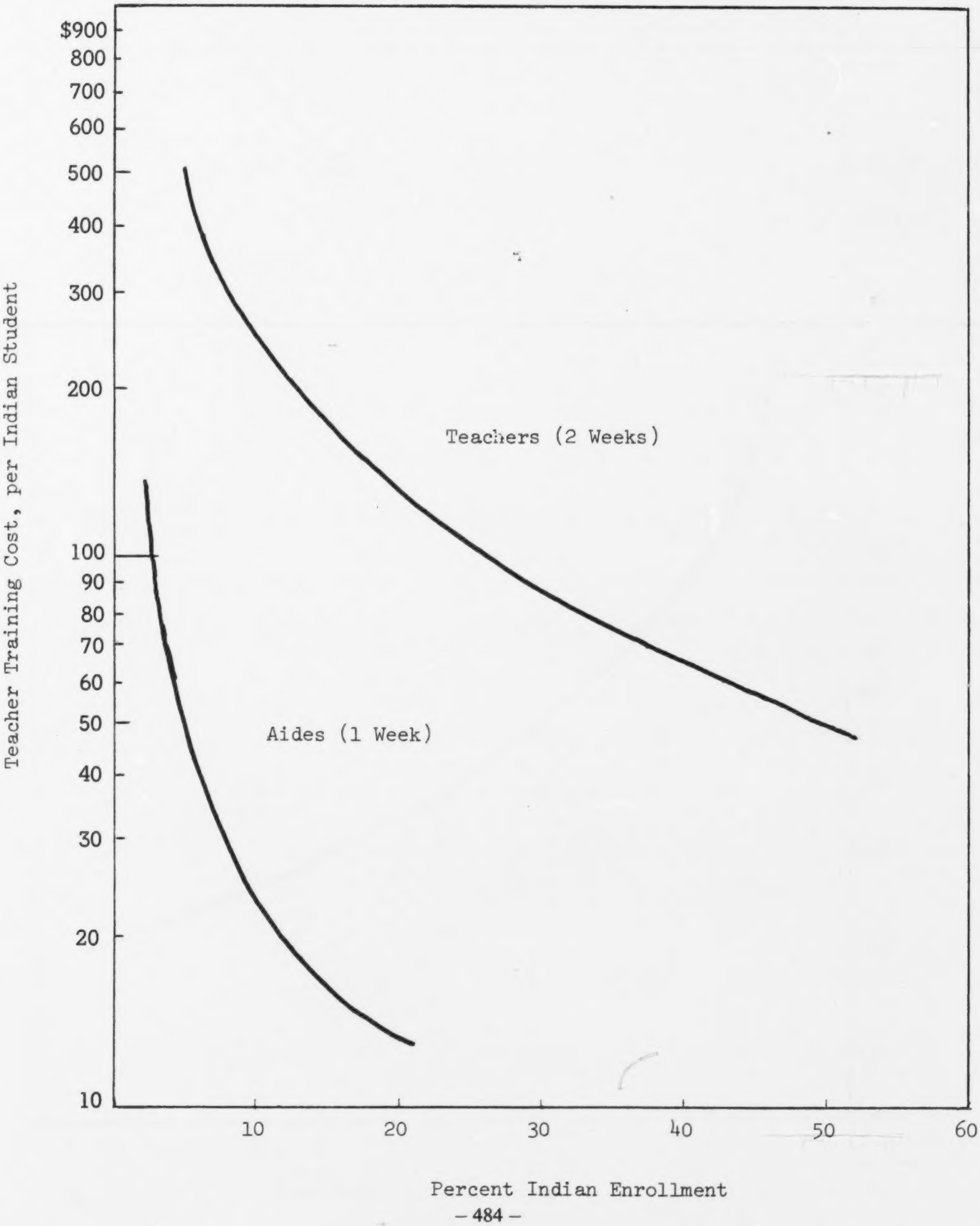


Figure 2

COST PER INDIAN STUDENT FOR TEACHER TRAINING PROGRAMS AS A FUNCTION OF PERCENT ENROLLMENT



Estimate of State-wide Costs

The number of Indian children enrolled in the state's public schools is about 10,000 (9,669 were reported for 1968-69 and 10,674 for 1969-70). The distributions for 1968-69 by grade and by district size are shown in Tables 5 and 8; the percentages of enrollment in Table 6.

Indian programs were funded in 1969-70 in 30 districts, affecting nearly half of the Indian students in the state. The present state and Federal programs are almost exclusively concentrated in the districts on or bordering Indian reservations. Most of these schools have Indian enrollments of 10 percent or more. The remainder of the Indian students in the state are widely distributed, as is evident from the data in Table 6 and 7. One hundred sixteen districts reported enrollments including at least one percent Indian students. The highest percentages occur in the small districts (see Table 7); those with enrollments of less than 1,000 account for about 3,000 Indian students. On the other hand, the urban and suburban school districts with enrollments above 10,000 have only about 2,300 Indian students, for an average of only 0.6 percent of the students. For example, the 602 Indian children in Seattle schools are distributed throughout two thirds of the schools in the district. The elementary schools that have the highest percentage of Indian students are Georgetown at 8.7 percent (22 students) and Gatzert at 8.5 percent.

About half of the Indian students are presently not affected by the special programs discussed in this report. Outside of the Johnson-O'Malley districts, a small number of Indian children are enrolled in Headstart, Follow-Through, and dropout-prevention programs. A new state-supported program in Seattle, American Indian Heritage, will serve elementary school Indian students. This is one of the few programs developed specifically for urban Indian students. It is not possible to determine what benefits disadvantaged Indian youth obtain from the URRD, Title I, and Title VIII programs in the non-Johnson-O'Malley schools, but since the Indians are greatly outnumbered by other disadvantaged groups (primarily white and Negro poor), the programs are not usually concerned with needs unique to Indian children.

The special Indian programs recommended in this report should probably be extended to the majority of the Indian children in the state. Grants should be made on a district-by-district basis for programs tailored to specific needs and circumstances in each district. To forecast state-wide costs, however, will require making some approximations and arbitrary assumptions about program applicability and costs in schools having small percentages of Indian students. These assumptions involve principally two issues:

1. Whether programs that have been applied and are recommended in the Johnson-O'Malley schools will be educationally successful if applied in the same way elsewhere in the state. Note that the JOM districts are almost all small and rural, and have moderate to high Indian enrollments.

2. Whether the per-pupil costs of the programs as they have been applied are applicable to other, much different, school districts, and whether practical ways can be found to control costs that tend to increase rapidly with decreasing percentages of Indian students (*e.g.*, teacher training costs) without sacrificing the purpose of the program.

One of the principal deficiencies now is a lack of data on effectiveness of the various programs. Some of the most costly programs ranked high on the priority list. The most expensive components of the over-all cost of each of the three recommended program examples were (in decreasing order):

1. Use of teacher aides (effectively reduces class size).
2. Teacher training.
3. Follow-Through.
4. Headstart.

For a state-wide cost estimate, the cost data given in Table 4 were applied to the Johnson-O'Malley school districts for each of the three recommended program examples. The per-student cost obtained in that way was then arbitrarily applied to the entire state.

There were 30 Johnson-O'Malley school districts funded in 1969-70. The number of Indian students enrolled in these schools is approximately 4,330, and the total enrollment is 44,000. We have assumed that the distribution by grade is the same as the state average given in Table 5, except that the kindergarten enrollment figure for Indians was increased to include all eligible children (the actual kindergarten enrollment is about 75 percent of the first-grade enrollment). Thus, the distribution assumed was:

	Indian	Total
K	400	3,120
1-6	2,460	21,300
7-9	970	10,200
10-12	600	9,380
	4,430	44,000

For this population of students, the total extra cost for each of the three recommended program examples described previously was estimated. The details of the calculations was given in Appendix B. Table 8, following, summarizes the results. Again it should be pointed out that these costs are in excess of the normal student entitlements.

The estimated cost for Program 3 (minimum basic program) is given as $700 per Indian student per year (in Johnson-O'Malley schools) in addition to normal educational costs. This can be compared with the funding level of about $250 per student for all Indian programs in those schools in 1969-70 (see Table 2). Thus, the recommended minimum program would cost nearly three times the present expenditure.

The hazards of applying this cost estimate to the state as a whole were discussed above. In order to conduct an effective program with an additional cost of $700 or more per year per student in schools having low percentages of Indian students, program modifications will certainly be needed. Some possibilities are:

1. Where percentage Indian enrollments are small, the Indian students could be clustered in fewer classes and special compensatory measures applied only to those classes.
2. The programs could be applied as suggested to the Johnson-O'Malley schools and others having relatively high Indian enrollments (say, above 10 or 15 percent). The remainder of the Indian children in the state (approximately 5,000) would be served by (a) allowing them freedom to select which school they attend and (b) providing each with a voucher equal in value to the per-student expenditure for Indian programs established in the Johnson-O'Malley schools.

Table 5

RACIAL DISTRIBUTION OF STUDENTS
IN WASHINGTON STATE BY GRADE
(1968-69 School Year)[1]

	Number by Race				
Grade	Negro	Oriental	Indian	Spanish[2]	White
K	1,582	726	647	903	52,265
1-6	9,645	5,029	5,347	7,186	356,449
7-9	4,040	2,225	2,111	2,621	173,596
10-12	3,070	2,010	1,286	1,776	160,558
H,primary[3]	385	45	156	176	6,066
H,secondary	427	25	122	113	4,635
Total	19,149	10,060	9,669	12,775	753,569

---

[1] From district enrollment reports to the State Office of Public Instruction.

[2] Spanish surnamed.

[3] Handicapped programs (H).

Table 6

PERCENTAGE DISTRIBUTION OF INDIAN STUDENTS IN THE DISTRICTS[1]

(1968-69 School Year)[1]

Percent Indian Students	No. of Districts
Less than 1	205
1 to 5	70
5 to 10	20
10 to 15	9
15 to 20	6
20 to 40	5
40 to 60	2
60 to 80	1
80 to 100	3

Table 7

DISTRIBUTION OF INDIANS BY DISTRICT SIZE

(1968-69 School Year)[1]

Size Group	No. of Districts	No. of Indian Students	Average Percentage of District Enrollment	Percentage of State Enrollment
> 20,000	6	1,647	0.66	17.0
10,000- 20,000	9	642	0.5	6.6
5,000- 10,000	20	1,027	0.7	10.6
2,500- 5,000	30	1,997	1.8	20.7
1,600- 2,500	25	631	1.1	6.5
1,000- 1,600	28	796	2.2	8.2
500- 1,000	60	1,543	3.4	16.0
200- 500	65	612	2.8	6.3
200	83	774	11.2	8.0
	Total	9,669		

---

[1] From district enrollment reports to the State Office of Public Instruction.

Table 8

ESTIMATED COST FOR EACH OF THE THREE PROGRAM EXAMPLES

		Estimated Cost[1]	
	For 30 JOM Districts		
Program	Total Annual Cost	Annual Cost per Indian Student	State-Wide Application[2]
1. The Model Program	$4,900,000	$1,100	$11,000,000
2. The Limited Program	4,020,000	900	9,000,000
3. The Basic or Minimum Program	3,200,000	700	7,000,000

---

[1] In excess of normal entitlements.

[2] It is assumed that the average cost per student will be applicable throughout the State.

BIBLIOGRAPHY

BIBLIOGRAPHY

Click, James O., *et al.* "Annual Report, 1968-69, Indian Education," Olympia, Washington: State Office of Public Instruction.

Gaarder, Bruce, "Education of American Indian Children," Report 002389, (ED-018299). Washington, D.C.: U. S. Office of Education, Dept. of Health, Education and Welfare, November 1967.

Joint Committee on Education, Rep. Frank B. Brouillet, Chairman, "Education in Washington: The Fifth Biennial Report Submitted to the 41st Session, Washington State Legislature." Olympia: The Committee, 1968.

LaCoste, Roberta, "Early Childhood Education–A Top Priority," presented to the Washington State Conference of Parents and Teachers. Seattle, 1970.

Lurie, Nancy O., "Report on the American Indian Chicago Conference." *Current Anthropology,* 2 Dec. 1961, pp. 478-500.

Miller, Harold, "Indian Education." *The College of Education Record,* University of North Dakota, December 1966. Available as Report RC001900 (ED 014 346).

National School Public Relations Association. "USOE Study Attacks Title I Funding." *Washington Monitor* (Suppl. to Education USA), September 14, 1970.

Nielsen, Mary M., "Directory of Information–Headstart and Follow-Through in State of Washington, 1970-71." Olympia: Washington State Office of Economic Opportunity.

Office of Education, Bureau of Research, U. S. Dept. of Health, Education and Welfare. "Final Report, Project No. 70784-24, National Research Conference on American Indian Education." Washington, D.C., Report BR-7-0784 (ED-018 287), P.A. 24, of the U.S.O. of E. March 1968.

Potter, Conrad H., *et al.* "A Survey of Programs in Early Childhood Education, The State of Washington, 1968-1969." Ellensburg: Central Washington State College, and Olympia: State Superintendent of Public Instruction, December 1965.

U.S. Senate Special Subcommittee on Indian Education. "Indian Education: A National Tragedy–A National Challenge," 1969 Report of the Committee on Labor and Public Welfare. Washington, D.C.: U. S. Government Printing Office, November 3, 1969.

The Report of the President's Commission on National Goals. "Goals for Americans." Englewood Cliffs: Prentice-Hall, 1960.

APPENDICES

Appendix A

RESOURCE PERSONS FOR INDIAN EDUCATION PROGRAMS

The following persons contributed program ideas, recommendations, and/or cost information. However, the conclusions and recommendations in this report are those of the author, and endorsement by any of the following persons should not be assumed.

Joe Batali
Superintendent, Mount Adams School District
White Swan, Washington

Rich Boyd
Title III Coordinator
State Office of Public Instruction
Olympia, Washington

Warren Burton
Specialist, Intercultural Education
State Office of Public Instruction
Olympia, Washington

James O. Click
Supervisor of Migrant and Indian Education
State Office of Public Instruction
Olympia, Washington

Robert Deal
Superintendent of Wapato School District
Wapato, Washington

George Ellis
Superintendent, Port Angeles Public Schools
Port Angeles, Washington

John Emhoolah, Director
American Indian Heritage Program
Seattle Public Schools
Seattle, Washington

Floyd Gabriel
Director, Center for Migrant and Indian Education
Toppenish, Washington

Ted George
Indian and former teacher in Washington State

Howard Hasff
Coordinator of Federal Programs
Granger School District
Granger, Washington

C.V. Hostetter
Federal Program Coordinator
Auburn Public Schools
Auburn, Washington

George Kontos
Consultant, Battelle-Northwest
Richland, Washington

Milo Long
Title I Coordinator
State Office of Public Instruction
Olympia, Washington

Lorraine Misiaszek
Consultant for Indian Education
State Office of Public Instruction
Olympia, Washington

Robert Muehe
Education Director
Bureau of Indian Affairs
Yakima Agency
Toppenish, Washington

Harold Patterson
Superintendent, Taholah Schools
Taholah, Washington

Louis Patton
Coordinator of Special Programs
Wapato School District
Wapato, Washington

Helen Peterson
Project "Follow-Through" Director
Yakima Public Schools
Yakima, Washington

Walter Polley
Coordinator of Federal Programs
Toppenish School District
Toppenish, Washington

Stanley Smartlowit
Chairman, Education Committee
Yakima Tribal Council
Toppenish, Washington

Glen O. Willison
Superintendent of Cape Flattery
School District
Clallum, Washington

Appendix B

PROGRAM COST ESTIMATES

The unit cost of each of the three program examples described in the report was estimated by utilizing the data in Table 3. The results are per-pupil costs in dollars.

Program 1

1. Home-School Liaison: 50 times the total Indian enrollment.
2. Compensatory Programs: (250) (0.10) (total Indian enrollment).
3. Prekindergarten: 1,000 times the number of Indian children who will be eligible for K the succeeding term.
4. Follow-Through, K-2: 650/0.8 times the number of Indian children enrolled in K through 2.
5. Teacher Aides, 3-6: 100 times the *total* 3-6 enrollment.
6. Teacher and Teacher-Aide Training Programs: (2)x(275)x(number of teachers, counselors, and principals), plus 200 times the number of teacher-aides.
7. Curriculum Enrichment: 40 times the high school Indian enrollment.
8. Expanded Counseling: 25 times the grades 7-12 Indian enrollment.
9. Health Services: 20 times the Indian student enrollment.
10. Food Services: (120)x(0.75)x(Indian student enrollment).

The summing of these cost elements can be simplified by estimating the number of children of pre-kindergarten and kindergarten ages from the first-grade enrollment. (State kindergarten enrollments do not presently include all of the eligible children.) Similarly, the K through 2 enrollment can be estimated from K-6 or 1-6 enrollments (elementary school figures in Table 5).

Program 2

1. Home-School Liaison: same as Program 1.
2. Compensatory: 250 (0.20) times the total Indian enrollment.
3. Prekindergarten: same as Program 1.
4. Teacher Aides, K-4: 100 times the total K-4 enrollment.
5. Teacher Training: (2) (275) times the number of teachers, counselors and principals.
6. Curriculum: same as Program 1.
7. Counseling: same as Program 1.
8. Health Services: 20 times the K-6 Indian enrollment.
9. Food Services: 120 times the K-6 Indian enrollment.

The program cost formula is therefore a sum of these terms.

Program 3

1. Home-School Liaison: same as Program 1.
2. Compensatory programs: (250)(0.30) times the total Indian enrollment.
3. Prekindergarten: same as Program 1.
4. Teacher Aides: same as Program 2.
5. Teacher Training: 275 times the number of teachers, counselors and principals.

The program cost formula is therefore a sum of these terms.

SPECIAL EDUCATION PROGRAMS FOR MIGRANT CHILDREN: RECOMMENDATIONS & ESTIMATED COSTS

498/499

SPECIAL EDUCATION PROGRAMS FOR MIGRANT CHILDREN: RECOMMENDATIONS AND ESTIMATED COSTS

This report deals with programs for migrant students in Washington State. The techniques and approach used are essentially the same as those employed for the report on Indian programs.

Applicability of Programs

A Washington State migrant worker survey conducted in 1966 by Consulting Services Corporation (CSC) showed that 41 percent of the state's migrant farm workers were Mexican-American, 51 percent Anglo, and nine percent Indian and Negro. However, since Mexican-American family sizes were found to be considerably larger than those of other migrants, it is probable that considerably more than half the migrant children in the schools are Mexican-American.

The objectives of the state's present migrant education programs are to provide teacher training, curriculum development, various support services, and compensatory programs for children of migrant farm laborers who attend school on either a part-time or full-time basis (see C. D. Babcock, J. O. Click, et al). Under this program, both the "true" migrants and "five-year" migrants are eligible. The term "five-year migrant" refers to former migrant farm workers who are still in agricultural labor and who have not been out of the migrant stream more than five years. The important difference from an educational standpoint is that the exmigrant children remain in residence and therefore can attend school the full year, generally in one school district. Some "true" migrants are residents of the State of Washington, but migrate about the state and in neighboring states. The children may attend school the full year, but in several districts.

Typical educational pattern for the true migrant child is that he:

1. Changes schools several times during the term.
2. Usually misses a week or more of school upon each change of residence.
3. Is out of the state, and possibly out of school, during most of the months of December through February.
4. Drops out of school entirely during the early teens, having attained about a fifth-grade level of education.

The exmigrant child has a much better attendance record, but his high school dropout rate is very high. The CSC survey (Harbeston, 1966) showed that the typical adult migrant had completed the eighth grade, but the typical Mexican-American had averaged only five years. (These figures do not necessarily indicate actual achievement levels.)

The statistical data on migrant child enrollments in the state's public schools are limited to those from the districts funded for Title I–Migrant Programs (about 32 districts), and these figures are only preenrollment *estimates*, taken from program applications. The data from the 32 districts indicate that the total number of migrant students in 1968-69 ranged from about 4,000 (in December) to 8,000 (in the early autumn). Of these, about 45 percent were shown as true migrants, although this figure may be inflated because of multiple enrollments.

These brief paragraphs about migrant education in Washington State barely identify a few of the problems. A more adequate discussion of the subject is far beyond the scope of this report.

Programs Investigated

Most of the programs specifically for migrant students in the public schools are supported by Federal Title I–Migrant funds administered by the State Office of Public Instruction. Some additional funding has been forthcoming in the past few years from state Urban, Racial, Rural, and Disadvantaged (URRD) sources. Both Title I–Migrant and URRD grants are awarded competitively for specific program proposals. In addition, migrant students, as any other students, benefit to some degree from other programs for the

Table 1

PROGRAMS RECOMMENDED MOST FREQUENTLY BY RESOURCE PERSONS
(In descending order of priority)

1. Preschool and other early childhood education
2. Home-School Liaison
3. Teacher-Training
4. Remedial Programs
5. Curriculum Improvements
6. Teacher-Aides
7. Health Services
8. Bilingual Education
9. Counseling
10. Food Services

Note: Resource persons who are Mexican-American ranked teacher training, curriculum improvements, and bilingual education education at the top of the list, giving them about equal priority. The remainder of the programs ranked in essentially the same order as they appear above.

---

disadvantaged, such as Title I–Basic. Recently, Title VII funds for bilingual education programs have become available. These would apply primarily to Spanish language programs in this state.

A variety of programs for migrant students are carried out in the state, varying considerably in emphasis from district to district. Not surprisingly, as in the case of the Indians, most resource persons emphasized one or more of the types of programs already being applied to some degree in at least some school districts. New programs not already on the "list" were rarely suggested.

The programs most often recommended are listed in order of priority in Table 1. Each program is described briefly in the next few pages.

1. **Early Childhood Education.** Emphasis is on preschool preparation, usually through a "Headstart" program or its equivalent. Present indications are that special conceptual skill development efforts should also be continued at least three more years for most disadvantaged children. A program similar to "Follow-Through" may meet this need.

   Recent pilot programs with child-parent centers may point the way to a new type of "Headstart" that could supplement the formal program or meet an unfilled need among "true" migrants, who generally cannot take part in Headstart programs.

   Another form of Headstart for migrants is the educational component of the day care programs. At present, about 20 percent of the preschool migrant children in the state are served by day care centers.

2. **Home-School Liaison.** Adults from the "migrant" community are employed to work as home visitation aides for the school. Their purpose is to improve communications between the home and the school and to influence family interest and student motivation. They achieve these goals through interpreting the school policies and programs for the family and by explaining circumstances in the homes for the staff of the school. It is essential that the aides are well accepted in the homes, are able to be impartial, and carefully respect confidences.

3. **Teacher Training.** Summer institutes, workshops, and in-service training programs are used to help the teachers learn the history of American migrant farm workers, to learn the cultures and life styles of various migrant groups (especially the Mexican-American. Indian, and Negro

migrants) and to become sensitive to the cultural backgrounds and dispel the various misconceptions and clichés most white Americans have inherited. The training may also cover techniques and curriculum programs more suited to the migrant children, but these programs must be accompanied by development of an increased understanding of the relevant history and culture for which the programs are designed. The need for such teacher training programs will diminish if a substantial percentage of the professional staff in the schools is Mexican-American.

4. **Remedial Programs.** These programs may be carried on throughout K-12, but thus emphasize reading, mathematics, and other basic skills in the elementary school years. They should be provided for the students at as early an age as possible and as soon as a difficulty is detected. The programs may involve individualized instruction by remedial reading specialists and other professionals, summer schools, tutoring, and introduction of methods better suited to the interests and needs of the disadvantaged group.

   A full summer school program (10 or 12 weeks) is needed in migrant labor areas, especially for the benefit of true migrant children.

5. **Enrichment of the Curriculum.** Most of the suggested curriculum revisions fall into three categories:

   a. Revision of the social studies and language arts curriculum to make substantial additions of the history and culture of Mexican-Americans and migratory laborers.

   b. Addition of curriculum found to be particularly relevant to the migrant students, including Mexican art and craft forms, music, dancing and games (taught by local adults from the migrant groups when possible).

   c. Expansion or addition of appropriate vocational education programs.

6. **Teacher Aides.** Adults from the migrant community are employed as teacher aides. An aide works in the classroom, under the direction of the teacher, helping individual students and small groups in drill, recitation, testing, etc. Direct contact with the children is important. A teacher aide program is normally used in the lower grades, but may be effectively extended into junior high school if persons competent in the subjects are available.

7. **Health Services.** Public health nurses' and part-time physicians' services are provided to give each child a thorough physical examination each year and maintain much closer surveillance over the health of the children than is normal in school programs.

8. **Bilingual Education.** Bilingual education consists of teaching all subjects in two languages (English as the second language) in kindergarten and the lower primary grades. The program requires curriculum in both languages and considerable training of the teachers and teacher aides. This program is expected to remove the language handicap of Spanish-speaking children by the mid-elementary grades. The program also enriches the education of nonmigrant children by including them in the classes. In the Yakima County bilingual program (1970-71 school year; kindergarten classes in Toppenish and Grandview) the classes are 50-50 Anglo and Mexican-American.

9. **School Counselors.** Professional counseling services, including vocational counseling, are expanded. Obviously, the counselor must be sensitive to the migrant child's problems.

10. **Food Services.** Title-I funds have been used by some districts to pay for free or reduced price lunches for migrant children. Breakfast or a snack has also been provided in some cases. This program is essential for the well-being of many children.

Present Funding

Most of the above programs are presently funded to some degree from Federal and state sources. The annual funding levels in Washington State under Title I–Migrant have been constant at about $1.4 million for the past few years. About $930,000 is distributed to the school districts for the conduct of programs. The remainder supports the Center for the Study of Migrant and Indian Education in Toppenish, the Migrant Education Materials Center, Moses Lake, some teacher-training projects, and state migrant-program administration. These funds provide programs in up to 32 districts serving approximately 5,000 migrant children in the regular term and 2,300 in the summer programs.[1] About half of the children are true migrants.

Migrant children also benefit from other remedial programs supported by URRD (state) and Office of Economic Opportunity (both Federal and state funds. Title I–Basic remedial projects in some districts include migrant children, although they are not included as "disadvantaged" for Title I–Basic funding if they have been counted for Title I–Migrant. Headstart projects in Washington State apparently include about 650 migrant children, since a survey made in 1968 (Conrad H. Potter, *et al*) showed that 18 percent of Headstart children had Spanish surnames.

The prekindergarten educational component of the migrant day-care program in Eastern Washington began in March of 1970 in five centers (200 children) and is now extended to nine centers, for approximately 400 children. The cost of this Headstart component is covered by URRD and other funding sources.

Goals of a Model Program

A special program for migrant students in public schools should aim to meet the following goals:

1. Developing and maintaining the students' learning rate so that the average achievement of migrant students at least equals that of the average Washington State student of the same age.
2. Giving a prominent place in the curriculum to the history and culture of the various migrant groups.
3. Building a positive self-image in migrant youth.
4. Involving the parents in planning and carrying out the educational program.
5. Increasing the number of Spanish-speaking teachers, introducing bilingual instruction in the early grades, and training all teachers for more effective teaching of the poor, the migrant, and the racial minorities.

These goals were drawn mainly from the recommendations presented by the Washington State Joint Legislative Committee on Education in 1968,[2] by the Governor's Advisory Committee on Mexican-American Affairs, by the Interagency Advisory Committee on Mexican-American Affairs, and a study by Kenneth Smith (see bibliography).

Suggested Program Examples

A balanced program that will meet the variety of individual needs of migrant children in their education will necessarily include many of the programs identified in Table 1. To meet the goals stated above, it seems imperative that the programs begin in the preschool years and emphasize language and basic skill development heavily during the primary grades.

Of the many possible program alternatives, three examples of programs have been selected that represent three levels of program emphasis. The first is a relatively complete or model program, that tends to meet every educational need as it arises. The second is a more limited program, and the third is a basic minimum program whose success in meeting the program goals may be expected to be spotty and very dependent on the ability of the teachers. Each of these programs is described below and also summarized in Table 2.

---

[1] The enrollment data are approximate since they are estimates from the districts, submitted on program proposals. In addition, duplicate counts are likely because true migrant children usually change schools a few times during the term. Many of the summer school children are also enrolled in the regular term.

[2] Joint Committee on Education, pp. 39-44.

Program 1 – The Model Program

1. One year of prekindergarten education (Headstart) for every migrant child. (Note that this is included in the Day Care Center program.)
2. Three years (K-2) of a Follow-Through type program for every migrant child and with nonmigrant children involved to at least 20 percent of the program enrollment. (The percentage of nonmigrant children may include all children eligible for Follow-Through by the usual criterion – poverty – but costs above the 20 percent level would not be identified as migrant program costs.) Follow-Through would include bilingual education where needed, increasing the cost slightly.
3. Home-school liaison for all migrant children.
4. For grades 4-7, all teachers, counselors and principals receive an average of 90 hours of summer workshop or in-service training per year and aides receive 60 hours per year.[1]
5. Compensatory basic skills programs for those showing significant problems and deficiencies. It is assumed that all true migrants will be enrolled in a summer school and 10 percent of the regular term students will be in compensatory programs.
6. Curriculum improvement for migrant children from grades 7 through 12.
7. Teacher aides in all classes with more than 5 percent migrant children from grades 3-6 (Follow-Through covers K-2).
8. Instruction in both Spanish and English would be provided through the third grade. This would be part of Follow-Through in K-2.
9. Expanded counseling services for migrant students in grades 7-12.
10. Expanded health services for grades K-6.
11. Free or reduced price lunches and breakfast for migrant students in K-6 (full term and summer school).

Program 2 – Limited Program

1. One year of prekindergarten education (Headstart) for each migrant child.
2. Home-school liaison for all migrant children.
3. All teachers for grades 3-6 receive an average of 60 hours of summer workshop or in-service training per year and aides receive 30 hours per year.
4. Compensatory basic skills programs for those showing significant problems and deficiencies. It is assumed that all K-6 true migrants will receive full summer school and that 20 percent of the full-term students will be enrolled in compensatory programs.
5. Curriculum improvement for migrant children from grades 10 through 12.
6. Teacher aides in all classes with more than 5 percent migrant children from grades K-4.
7. Bilingual education provided where needed in grades K-2.
8. Expanded counseling services for migrant students in grades 10-12.
9. Expanded health services for grades K-4.
10. Free or reduced price lunches and breakfast for migrant students in K-4 (full term and summer school).

Program 3 – Basic or Minimum Program

1. One year of prekindergarten education (Headstart) for each migrant child.
2. Home-school liaison for all migrant children.
3. All teachers for grades 2-6 would receive an average of 30 hours of summer workshop or in-service training per year.
4. Compensatory basic skills programs for those showing significant problems and deficiencies. Assume that all K-6 true migrants receive full summer school and that 30 percent of the full-term students would be enrolled in compensatory programs.
5. Curriculum improvement for migrant children from grades 10 through 12.
6. Teacher aides in all classes with more than 5 percent migrant children from grades 2-4.
7. Bilingual instruction provided where needed in kindergarten and first grade.
8. Expanded health services for grades K-4.

---

[1] Some resource persons advised a minimum of 4 to 5 weeks of training for teachers in the first year, 2 or 3 weeks followup each year thereafter; 3 weeks per year for aides. Such training for high school teachers would also be advisable.

Table 2

COMPONENTS OF THREE SUGGESTED PROGRAM EXAMPLES

	Application		
Program Components	Program 1	Program 2	Program 3
Preprimary Education			
Headstart	All migrant pre-K	All migrant pre-K	All migrant pre-K
Follow-Through	All migrant K-2	—	—
Home-School Liaison	All migrant	All migrant	All migrant
Teacher Training[1]	All 4-7 prof: 90 hrs	All 3-6 prof: 60 hrs	All 2-6 prof: 30 hrs
	All aides: 60 hrs	All aides: 30 hrs	
Remedial Programs			
Summer School	All true migrant	All true migrant K-6	All true migrant K-6
Other	5% of migrant children	10%	15%
Curriculum Improvement	Grades 7-12	Grades 10-12	Grades 10-12
Teacher Aides	Grades 3-6[2]	Grades K-4	Grades 2-4
Bilingual Education[3]	Grades K-3	Grades K-2	K-1
	(Combined with Follow-Through)		
Counseling	Grades 7-12	Grades 10-12	—
Health Services	Grades K-6	Grades K-4	Grades K-4
Food Services	Grades K-6	Grades K-4	—

---

[1] Note that bilingual education covers the early grades.

[2] For schools with Spanish-speaking migrants.

[3] Aides are included in Follow-Through.

Table 3

AVERAGE COSTS OF SPECIAL EDUCATIONAL PROGRAMS FOR DISADVANTAGED CHILDREN[1]

Program	Cost per Child[2]
1. Prekindergarten education (Headstart or similar).	$1,000
2. Prekindergarten combined with full-time day care–educational component only (full-year program).	400 (Note 1)
3a. Follow-Through; a post-Headstart program of concentrated remedial education in K-2.	650 (Note 2)
3b. Follow-Through with bilingual instruction.	750 (Note 3)
4. Home-school liaison program.	50
5. Teacher and teacher-aide training (Note 4).	
a. Training institutes held at colleges or educational centers.	300 per week per participant
b. Workshops held in participants own district.	250 per week
c. In-service training.	300-600 per year per trainee
d. Workshops for paraprofessionals.	200 per week
6. Compensatory Programs.	
a. Remedial reading program.	250
b. Tutoring.	250 (Note 5)
c. Summer School–12.	300
d. Summer School–Camp (full-time counseling, diversified academic and social activities, and board).	50 per week
7. Curriculum enrichment–assuming special classes meet 2 or 3 times per week.	40
8. Teacher aides in kindergarten and primary grades. (Assume class sizes per professional do not change.)	100 (Note 6)
9. Health services.	20
10. Bilingual education.	300 (Note 7)
11. Counseling.	25 (Note 8)
12. Food services–breakfast or snack and lunch furnished.	120

---

[1] These costs are in addition to the normal student entitlements.

[2] Costs are annual unless indicated otherwise; 180-day school year assumed.

Table 3 -- Continued

Notes:

1. It was assumed that 25 percent od day-care-Headstart operating costs would be funded as the educational program, as is presently the case in the migrant day-care project (NRO, Pasco).

2. The present Follow-Through projects are funded at about 20 percent more than this figure, but they are new and exemplary programs. Experience should result in a more economical program. The unit cost figure must be applied to the *total* Follow-Through enrollment, not simply the migrant enrollment.

3. Cost information on bilingual education is very limited. About 15 percent was arbitrarily added for additional costs to a Follow-Through program for added curriculum materials and staff training.

4. The staff training costs include the salaries of the participants.

   Staff training programs benefit all students, whether disadvantaged or not. Consequently, when a training program is costed on a per-student basis, the whole teaching load (*e.g.*, 25 students) is counted. The teacher training expense per disadvantaged student will be inversely proportional to the percentage disadvantaged enrollment (see Figure 2).

5. Tutoring costs vary directly with the number of hours of contact. The figure given is based on a two hour per week, sustained program.

6. Teacher aide assignments benefit all students, not just the disadvantaged. Therefore, total costs must be based on total teacher loads (*e.g.*, 25 students). Cost per disadvantaged student will be inversely proportional to percentage disadvantaged enrollment (see Figure 1).

7. The figure given is a rough approximation. Bilingual education cost data are very incomplete. Present bilingual programs are pilot projects generally involving costs for planning, curriculum development, evaluation and auditing, and extensive teacher training. The project in Yakima County (1970-71) was funded at $140,568 for a program planned for about 150 kindergarten children. The cost per student is apparently about $350 to $400 per year above a regular full-year kindergarten program. A bilingual, individualized reading program (Title I—Migrant) conducted in Moses Lake in 1968-69 apparently cost about $275 per year per student (full-year basis).

8. A student-counselor ratio of about one half the normally advised load is assumed. The cost figure represents one half of the counselor's salary.

Estimate of Basic Cost

The average or estimated cost for each of the above programs is given in Table 3. The notes attached to the table briefly explain the rationale for those cases in which the cost figure was not simply an average or median of the figures quoted by resource persons.

It should be noted that some of the programs, of their nature, serve or benefit *all* students in the classes, not just the migrant students. This applies to teacher aides, teacher training programs, and bilingual education. In order to apply the unit costs in these cases, it is necessary to use the total enrollment figures rather than those just for migrant enrollment.

The unit costs of teacher-aide and staff training programs will be markedly affected by the percentage of migrant students in a district; this is because the costs of training personnel remains constant regardless of the number of migrant students in a given class. These per-pupil cost variations are illustrated by the curves in Figures 1 and 2. It is evident that the additional cost per migrant pupil for one teacher-aide per classroom, where the ratio of students to professional teacher is kept at 25, becomes greater than the total over-all average educational cost when the percentage of disadvantaged students in the class falls below about 15. When the training programs reach a per-pupil cost in excess of $500 per year, various forms of individual instruction, such as tutoring and other remedial programs, appear to be attractive from an economic standpoint. At this point, however, difficult questions about the relative effectiveness of each of these programs must be raised. In addition, the tangible and intangible extra benefits to the families and the community from employing adult migrants in the schools as participants in the teaching process would need to be factored into the decision.

The teacher training programs (workshops or in-service training) also inevitably have high per-pupil costs when the percentage of disadvantaged students is low (see Figure 2). In this case, the point at which remedial programs become economically attractive is at about 10 percent migrant enrollment. The question of effectiveness must be asked again: "Will a good remedial program compensate for the damage done (especially during the early grades) by an unknowing and insensitive teacher?"

Other alternatives should probably be considered for those cases where the migrant student enrollment is low. The most obvious is to group the migrant children into a few classes and carefully select, or train, particular teachers. In these cases, teacher-aides could be assigned to selected classrooms, and the cost of the program in the area below 15 percent migrant enrollment may be reduced by up to a factor of two.

Table 4

ETHNIC DISTRIBUTION OF STUDENTS IN WASHINGTON STATE BY GRADE

(1968-69 School Year)[1]

Grade	Number by Ethnic Group				
	Negro	Oriental	Indian	Spanish[2]	White
K	1,582	726	647	903	52,265
1-6	9,645	5,029	5,347	7,186	356,449
7-9	4,040	2,225	2,111	2,621	173,596
10-12	3,070	2,010	1,286	1,776	160,558
H,primary[3]	385	45	156	176	6,066
H,secondary	427	25	122	113	4,635
Total	19,149	10,060	9,669	12,775	753,569

---

[1] October 1968 figures.

[2] Spanish surnamed.

[3] Handicapped programs (H).

Figure 1

COST PER MIGRANT STUDENT FOR TEACHER AIDES AS A FUNCTION OF PERCENT MIGRANT ENROLLMENT

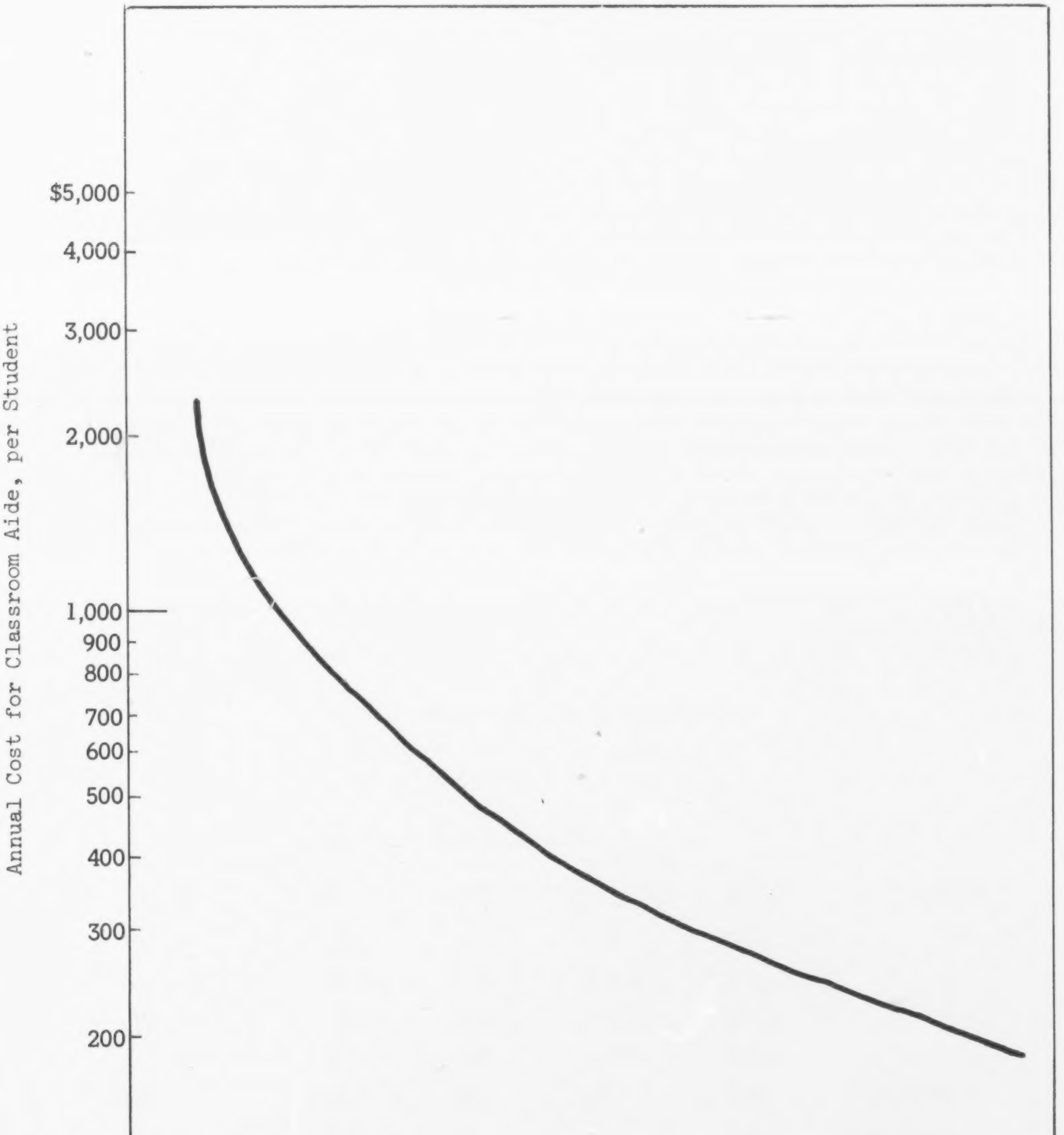


Figure 2

COST FOR TEACHER TRAINING PROGRAMS PER MIGRANT STUDENT AS A FUNCTION OF PERCENT ENROLLMENT

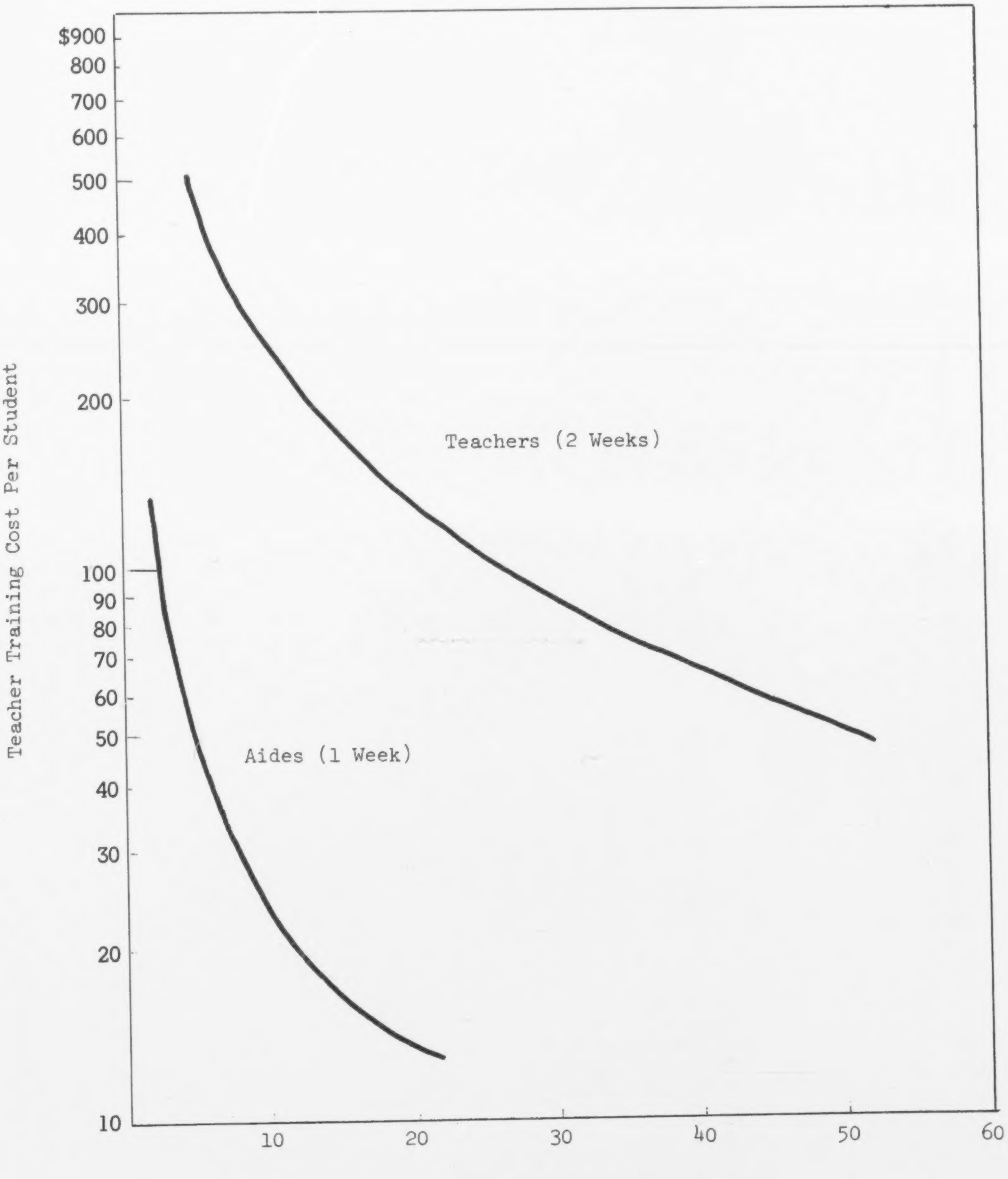


Table 5

ENROLLMENT DISTRIBUTION BY ETHNIC GROUP AND DISTRICT SIZE

(1968-69)[1]

School District Size Group	Enrollment Range	No. of Districts	Ethnic Distribution Percentage				
			Negro	Oriental	Indian	Spanish	White
1	>20,000	6	5.9%	2.3%	0.66%	0.88%	90.25%
2	10,000-20,000	9	1.4	1.1	0.5	0.88	96.1
3	5,000-10,000	20	1.0	0.75	0.7	1.4	96.13
4	2,500- 5,000	30	0.3	0.6	1.8	2.8	94.45
5	2,000- 2,500	25	0.6	0.8	1.1	3.5	93.9
6	1,000- 2,500	28	0.9	0.6	2.2	2.6	93.6
7	500- 1,000	60	0.2	0.5	3.4	2.1	93.7
8	200- 500	65	0.04	0.4	2.8	1.2	95.5
9	<200	83	0.05	0.3	11.2	0.4	87.97

---

[1] October 1968 enrollment figures.

Table 6

ETHNIC DISTRIBUTION IN WASHINGTON STATE SCHOOL DISTRICTS

	Number of Districts		
Percent	Negro	Indian	Spanish
None reported	201	(Included in <1%)	138
Less than 1%	103	210	118
1-5	15	70	47
5-10	5	20	9
10-15	1	9	4
15-20	1	6	2
20-40		5	7
40-60		2	1
60-80		1	
80-100		3	

Estimate of State-Wide Costs

The number of migrant children in the state's public schools fluctuates by a factor of two, as pointed out earlier. State-wide enrollment statistics do not identify migrant children, but rather, give racial distributions. One of the categories is "Spanish Surnamed American," which is defined as "persons considered in school or community to be of Mexican, Central-American, Cuban, Puerto Rican, Latin American or other Spanish-speaking origin." In the State of Washington, essentially all Spanish surnamed are Mexican-American, and in addition, the vast majority are migrant or exmigrant.

No school statistics are available, however, on non-Mexican-American migrant students. The data on migrant worker populations for 1966 (Consulting Services Corporation) indicated that 51 percent of the workers were Anglo. However, Mexican-American migrant families averaged about twice as many children as Anglo migrant families. Thus, one suspects that while a majority of the state's migrant students are Mexican-American but that the number of other migrant students (mainly Anglo) is appreciable, probably 30 or 40 percent.

The state enrollment statistics show 12,777 "Spanish" enrolled in October 1968, and 13,841 in October 1969. The enrollment distributions by grade and by district size are shown in Tables 4, 5, and 6. The enrollments in 1968-69 for the 32 school districts now receiving Title I-Migrant funds were 7,300 Spanish surnamed students out of a total student enrollment of 82,000 (rounded figures).

These figures, however, are probably indicative of the highest Mexican-American school enrollment, because October is the month of the highest migrant worker population in the state (Consulting Services Corporation – Harbeston, 1966). The state office of migrant education estimates that the migrant enrollment varies by a factor of two through the school year; this agrees with the estimate that about one half of the migrants are in the 5-year or exmigrant group. Consequently, state enrollments of Mexican-Americans probably vary over the range of 7,000 to 14,000 during the year, and the enrollments of the 32 Title I-Migrant schools probably vary from about 3,600 to 7,300.

Sixty-seven percent of the Mexican-Americans were enrolled in Yakima Valley schools (October 1968), and five of those districts had percentage enrollments above 20 percent.

Actual migrant enrollments, adjusted for full-year attendance, would be needed to make valid cost estimates for any given program. Since these data are lacking, the following cost estimates are made, for illustrative purposes, using an arbitrarily selected enrollment figure of 7,000 migrant students. The simplifying assumptions are made that fluctuating enrollments and variations in school size or percentage migrant students do not affect the costs significantly.

The three program examples given in Table 2 and the unit cost data in Table 3 are applied to the arbitrarily selected enrollment figure of 7,000 migrant students in schools with a total enrollment of 80,000 students. The assumed enrollment distributions by grade, based on the distributions shown in Table 4, are:

Grades	Migrant	Total
K	505	5,740
1-6	4,035	46,100
7-9	1,470	16,800
10-12	1,000	11,360
Total	7,000	80,000

The results of the cost estimates for the three program examples are given in Table 7. It is not possible to make a valid comparison between the suggested per-pupil expenditures arrived at here and the actual percent expenditure rates in the state because the number of students served are not on the same basis. The program examples given assume full-year service to each of the 7,000 migrant students. Recent Title I-Migrant program proposals state that about 7,300 migrant children were served (2,300 in summer sessions), but many of these (probably one half) were served by the programs for only a fraction of the school year.

Table 7

ESTIMATED COST FOR EACH OF THE THREE PROGRAM EXAMPLES

(For the Selected Case of 7,000 Migrant Students)

	Total Annual Cost	Annual Cost Per Migrant Student[1]
Program 1	$9,710,000	$1,390
Program 2	$7,880,000	$1,120
Program 3	$5,250,000	$750

---

[1] In excess of normal entitlements.

BIBLIOGRAPHY

Bibliography

Babcock, Chester D., *et.al.* "Education, Washington State Migrant Programs Implemented Under Title I, Public Law 89-750, 1968-69." Olympia: Office of Public Instruction (also similar reports for 1967 and 1968 and migrant program plans for 1969 and 1970).

Governor's Advisory Committee on Mexican-American Affairs. "Report of Recommendations, March 31, 1970." Olympia: Office of the Governor.

Interagency Committee on Mexican-American Affairs. "The Mexican American." Washington, D.C.: The Committee, June 30, 1968.

Joint Legislative Committee on Education. "Education in Washington: The Fifth Biennial Report Submitted to the 41st Session, Washington State Legislature." Olympia: The Committee, 1968.

LaCoste, Roberta. "Early Childhood Education–A Top Priority." Presented to the Washington State Conference of Parents and Teachers, Seattle, 1970.

Nielsen, Mary M. "Directory of Information–Headstart and Follow-Through in State of Washington, 1970-71." Olympia: Washington State Office of Economic Opportunity.

Potter, Conrad H., *et.al.* "A Survey of Programs in Early Childhood Education, The State of Washington, 1968-69." Ellensburg: Central Washington State College, and Olympia: Office of the State Superintendent of Public Instruction, December 1965.

National School Public Relations Association. "USOE Study Attacks Title I Funding." *Washington Monitor* (Suppl. to Education USA), September 14, 1970.

President's Commission on National Goals. *Goals for Americans.* Englewood Cliffs: Prentice-Hall, 1960.

Smith, Kenneth O. "A One-Year Survey of Elementary Migrant School Children in Okanogan County, Washington." Thesis, University of Washington, 1967.

APPENDICES

Appendix A

RESOURCE PERSONS CONTACTED ON MIGRANT EDUCATION PROGRAMS

The following persons contributed program identification, resource, and cost information. However, the conclusions and recommendations are those of the author and endorsement by any of the following should not be assumed.

Joe Batali
Superintendent, Mt. Adams School district
White Swan, Wash.

Rich Boyd
Title III Coordinator
Office of Public Instruction
Olympia, Wash.

Warren H. Burton
Intercultural Education Specialist
Office of Public Instruction
Olympia, Wash.

Antonio Cardonos
Chairman, Chicano Education Association of Washington
Seattle, Wash.

James O. Click
Supervisor of Migrant and Indian Education
Office of Public Instruction
Olympia, Wash.

Antonio Daniel
Northwest Rural Opportunities
Pasco, Wash.

Robert Deal
Superintendent, Wapato School District
Wapato, Wash.

Henry Diaz
Director of Education
Northwest Rural Opportunities
Pasco, Wash.

Lloyd Gabriel
Director, Center for Migrant and Indian Education
Toppenish, Wash.

Mrs. Gustafson
Child Development Specialist
Northwest Rural Opportunities
Pasco, Wash.

Fred Haley
3018 N. Puget Street
Tacoma, Wash.

Jack Harbeston
Consulting Services Corporation
Tower Building
Seattle, Wash.

Howard Hasff
Coordinator, Federal Programs
Granger School District
Granger, Wash.

George Kontos
Consultant on Education
Battelle-Northwest
Richland, Wash.

Milo Long
Title I Coordinator
Office of Public Instruction
Olympia, Wash.

Mrs. Beverly McConnell
Pullman, Wash.

Anibal Mejia
Planning Dept., Washington State Office of Economic Opportunity
Olympia, Washington

Elton D. Minkler
Coordinator, Migrant Education
Oregon Board of Education
Salem, Oregon

Louis Patton
Coordinator, Special Programs
Wapato School District
Wapato, Wash.

Albar Pena
Chief, Bilingual Education Program Branch
Dept. of Health, Education, and Welfare
Washington, D.C.

Helen Peterson
Coordinator, Project Follow-Through
Yakima Public Schools
Yakima, Wash.

Walter Polley
Coordinator of Federal Programs
Toppenish School District
Toppenish, Wash.

Adan Tyrina
Washington State Employment Security Dept.
Mount Vernon, Wash.

Tomas Villanueva
Box 655
Toppenish, Wash

Wallace Webster
Director, Benton-Franklin Community Action Programs
Pasco, Wash.

Orville Widman
Deputy Superintendent
Intermediate School District No. 5
Yakima, Wash.

Martin Yanez
Former Director, Migrant Child-Parent Center
Grandview, Wash.

Appendix B

Cost estimate breakdowns for each of the three programs identified in Table 2.

Program One

1.	Headstart: (1,000 x 300 + (400 x 200)	=	$ 380,000
	(200 assumed in day-care programs)		
2.	Follow-Through with Bilingual Education:		
	$\frac{750}{0.8} \times (500 + 1{,}340)$	=	1,725,000
3.	Home-School Liaison: 50 x 7,000	=	350,000
4.	Teacher and Aide Training:		
	$(275 \times 3 \times \frac{28{,}600}{23} + (200 \times 2 \times \frac{51{,}840)}{25}$	=	
	1,025,869 + 829,440	=	1,855,309
5.	Remedial: 300 x 3,500	=	1,050,000
	250 x 7,000 x 0.10	=	175,000
6.	Curriculum: 40 x 2,470	=	98,800
7.	Teacher Aides: 100 x 30,700	=	3,070,000
8.	Bilingual Educ: 300 x 670 x 2 (assumed 50% migrant in classes grade 3 only; grades K-2 covered under 2)	=	402,000
9.	Counseling: 25 x 2,470		61,750
10.	Health: 20 x 4,530		90,600
11.	Food: 120 x 4,530		543,600
		Total	$9,802,059

Program Two

1.	Headstart: (1,000 x 300) + (400 x 200)	=	$ 380,000
2.	Home-School Liaison: 50 x 7,000		350,000
3.	Teacher Training:		
	$(275 \times 2 \times \frac{30,800}{23}) + (200 \times \frac{36,400}{25})$	=	
	736,522 + 291,200	=	1,027,722
4.	Remedial:		
	300 x 2,300	=	690,000
	250 x 7,000 x 0.20	=	350,000
5.	Curriculum: 40 x 1,000	=	40,000
6.	Teacher Aides: 100 x 36,400		364,000
7.	Bilingual Educ: 300 x 1,840 x 2	=	1,104,000
8.	Counseling: 25 x 1,000	=	25,000
9.	Health: 20 x 3,180	=	63,600
10.	Food: 120 x 3,180	=	381,600
		Total	$8,051,922

Program Three

1.	Headstart: (1,000 x 300) + (400 x 200)	=	$ 380,000
2.	Home-School Liaison: 50 x 7,000	=	350,000
3.	Teacher Training: $275 \times \frac{38,400}{23}$	=	459,130
4.	Remedial: 300 x 2,300 =	=	690,000
	250 x 7,000 x 0.30	=	525,000
5.	Curriculum: 40 x 1,000	=	40,000
6.	Teacher Aides: 100 x 23,000	=	2,300,000
7.	Bilingual Educ: 300 x 1,170 x 2	=	702,000
8.	Health: 20 x 3,180	=	63,600
		Total	$5,509,730

GIFTED STUDENT PROGRAM:
CURRENT STATUS AND RECOMMENDATIONS

GIFTED STUDENT PROGRAM:

CURRENT STATUS AND RECOMMENDATIONS

Introduction

One element of our student population which is, in general, not adequately served by the traditional "mass education" process is the gifted student – the student of superior mentality or one endowed with unusual talent or creativity. Frequently, these students are never challenged by the school system in which they reside nor are they exposed to a learning climate in which their talents and urge for creativity can be nurtured and cultivated. Unfortunately, the gifted child – unlike the educationally deprived child – is rarely viewed as a failure. The fact that he may fulfill only a fraction of his potential in school is of little concern – he meets school norms and is considered a "success." The traditional thought has been that the gifted student "has it made" and can look after his own interests. It is only in relatively recent times that the phenomenon of the "turned off" gifted student has appeared – also, the recognition that latent talent and creativity may be concealed in the educationally deprived. Concern for the gifted student's advancement has not been forcefully expressed although there is growing recognition of a need for providing for his particular needs.

The purpose of this report is to examine the programs for educating gifted students in the State of Washington, considering the subject in the light of basic educational opportunity and suggest recommendations to the Temporary Special Levy Study Commission. It is beyond the scope of this report to propose an ideal or model gifted student program.

General Approach

Understanding of the program for gifted students was obtained 1) from annual reports submitted by the Coordinator of Gifted Programs to the Superintendent of Public Instruction over the period 1963-1970, 2) from discussions with personnel in a number of school districts, and 3) from contacts with staff members of departments of education in institutions of higher learning. In addition, a detailed discussion was held with the Supervisor, Programs for the Gifted, San Francisco Unified School District.

Background of the Program

The legal basis for the present "gifted student" program is the Superior Capacity Student Act enacted in 1961 (RCW 28,26.010). The act was intended to " . . . improve the education of students of superior capacity . . . those who consistently show remarkable performance in academic pursuits or demonstrate exceptional ability." The act authorized the Superintendent of Public Instruction to conduct, coordinate, and aid in research; disseminate information to local districts; and allocate funds when made available by the legislature. It also empowered local districts either jointly or separately to employ special teachers and undertake special programs including seminars. Special programs in conjunction with institutions of higher learning were also permitted.

The program was implemented with an allocation of $50,000 for the fiscal year 1961-62, of which about 40 percent was devoted to pilot programs in local districts and 10 percent to research. The remainder financed the state office, consultants, etc. From 1963 through 1966 special funds were apparently not legislated and gifted student funds were included in the SPI's budget. The amounts spent on district programs ranged from $5,000 to $10,000 per year. For the biennium beginning in 1967, $507,000 was allocated to the education of superior capacity students and for the current legislative period, $513,000. From available records it appears that at least 70 percent of these funds are allocated to local districts.

Funding Formula

Funding allocations are based on the assumption that 5 percent of enrolled students are gifted and an allocation of $5.00 per (unweighted) gifted student is provided. This is a meager figure, amounting to approximately 1 percent of the gifted student's standard entitlement in the K-12 program. When based on total students, it is only 1/20 of 1 percent of the individual student's entitlement.

Current Gifted Student Program

Starting with fiscal year 1967, funds have been made available to implement programs for gifted students in the local districts based on the $5.00-5% formula described above. The districts are required to submit applications for the regular project funds, however, and not all districts apply. At the present time districts participating in the program include about 85 percent of the state student population.

In 1968 an innovation was added when funds were made available for "special supplementary projects" which, in actuality, complement the regular projects. These special supplementary projects were encouraged to introduce innovation and experimentation, to increase student-teacher interaction and generally improve means for identifying, understanding, and teaching the talented and creative. (Note that the original legislation addressed itself more to demonstrated academic performance than to talent and creativity.) The special supplementary projects were to be susceptible to objective evaluation and could involve higher institutions of learning and other agencies. A particular purpose of the special supplementary projects was to provide for the in-service training of teachers, which apparently was not authorized for the regular projects.

In 1969 almost $170,000 was devoted to regular projects in local districts; 139 districts participated and 177 projects were funded. Special supplementary projects numbered 11 and were funded to the extent of almost $60,000 total.

In the past three years the following trends are noted:

- An increase from 20 percent to 27 percent in the number of regular projects planned for elementary school children.
- A decline from 64 percent to 56 percent in the number of regular projects planned for secondary school children (grades 7-12).
- Little change in the number of regular programs planned to serve both elementary and secondary school children.
- An increase in the per-project allocation for special supplementary programs and, of course, a decline in the number of special projects approved, since the total allocation for this phase of the gifted student program has been constant over the two years involved.
- Involvement of the intermediate school districts in generating joint programs for small local school districts.

Regular Projects

The annual report on gifted student programs for 1969-70[1] includes capsule descriptions of the regular and special supplementary projects. We have analyzed these in a cursory fashion to develop, if possible, some insight into the nature of the projects, the intent of the projects, and the diversity in approach that exists. The various regular projects were grouped in arbitrary (but natural) groups.

- Exposure to new ideas and experiences.
- Creative activities and projects.
- Extended programs.
- Involvement of nonschool people.
- Facilities and materials.

The breakdown under these major headings is shown in Table 1. The rankings were obtained by simply noting in the brief program description whether or not the items listed in Table 1 were included. The numbers listed after the tabular entries represent the number of times that particular item was mentioned. Some projects may have included mention of two or three items. If so, all mentions were noted and are included in the table. It should be noted that no weighting factors for program size were used. Also, some subjective judgement was used in categorizing the program elements. Thus, the listing is not completely accurate – nor does it have to be to provide the desired broad insight into the kinds of programs offered.

In keeping with the objectives of the regular gifted student program, it appears that there has been a genuine effort to use the funds to provide educational opportunity beyond that included in the normal school program. A large fraction of the projects is intended to provide the participants with exposures to new ideas and experiences (65 mentions), a considerable number are aimed at creative activities in the form of projects covering a wide variety of subject areas (38 mentions), and an almost equal number are devoted to supplementing on-going programs. Considerable use is made of community experts, professionals – particularly artists and musicians – and college personnel (24 mentions). Facilities and materials received less attention as the principal program focus (11 mentions). Individualization of instruction was stressed in 9 instances and small group activities in 4. (It is probable, however, that the concept of individual activity is rather widespread throughout the regular program for gifted children; the specific mentions of individualized programs generally apply to more formalized "learning package" approaches.) It is significant – but not surprising – that only 5 mentions relate to gifted student identification. At the level of funding it is literally impossible to use any sophisticated identification techniques.

---

[1] **Lois H. Roth, "Programs for the Gifted, Creative and Talented, 1969-70". (Olympia: Office of State Superintendent of Public Instruction), January 5, 1970.**

In considering the approaches used in carrying out the regular gifted student program, one must continually keep in mind the level of funding which exists. Of the 133 programs in place in 1969-70:

- One program received less than $100.
- Ninety-four programs (including four joint programs) received from $100 to $1,000.
- Thirty-seven programs (including three joint programs) received from $1,000 to $10,000.
- One program received over $10,000.

With these funding levels, it is not surprising that most of the projects involved "one-shot" or intermittent activities. Thus, seminars, discussion groups, field trips, and individual projects are heavily favored program approaches. Extended programs – those supplementing regular classroom activities – also reflect the funding level, appearing as short workshops, clinics, or exposures to professionals.

Special Supplementary Projects

Characteristics of the special supplementary projects, derived in the same way as those of the regular projects, appear in Table 2. The principal point to be noted is the emphasis on teacher training and the relatively greater involvement of nonschool personnel. This changed emphasis is primarily the result of 1) the intent behind the special supplementary projects—in-service training and 2) the size of the grants which makes meaningful progress possible in these areas.

The distribution of grant allocations for the 11 projects is as follows:

- One less than $1,000.
- Nine between $1,000 and $10,000.
- One greater than $10,000.

Discussion

In general the gifted student does not receive more than minimum monetary support from state funds. The state-allocated funds tend to be primarily stimulatory, supporting only very limited opportunity for gifted students to experience new ideas or activities, or to engage in creative projects. The state-supported gifted students program cannot be truly thought of as an educational program, primarily because the level of funding is insufficient to provide continuous, cohesive, educational experiences. The program, however, can be thought of as an entry-level program primarily aimed at stimulating awareness of the existence of gifted students and providing for their recognition. The fact that the program makes both teachers and students themselves aware of the special status of gifted students is a positive feature. Such awareness fosters heightened teacher expectation and student self-image, both believed important to a student's achievement. If the gifted student's program is viewed within this context of limited scope, it is probably quite beneficial in terms of cost. However, it is not surprising that, with exception of the special supplementary projects, there are insufficient funds for satisfactory identification of students, for teacher training, or meaningful program evaluation.

The regular projects provide a nucleus for expansion at the district level. Limited informal inquiries throughout the state disclosed an almost complete absence of formal district-supported programs for the gifted student. This does not mean that the local district does not contribute– it simply means 1) that the contribution is not formalized as a specific program element (or budgetary item) and/or 2) it is largely voluntary depending upon the interest and enthusiasm of a dedicated teacher.

To estimate the extent of the local district's contribution is difficult. Relative to the extent of state funding, the local contribution is undoubtedly greater for the small grants. Only the very large grants are sufficient to completely support the involved personnel. Some of the special supplementary projects are of a magnitude – $5,000 to $15,000 – to be on a full-cost-recovery basis, but it does not necessarily follow that they are operated on this basis.

In the consideration of what constitutes programs for gifted students, there is a considerable "gray zone." In larger high schools, college placement or honors courses are frequently offered as part of the regular curriculum. Although these courses cater to the academically gifted, they should not be included in the same category as the regular or special supplementary projects. The demand for these courses arises because the total number of students is large enough to include in the normal distribution enough students with capability and interest to justify a special class. Such classes are essentially electives in the regular curriculum. In smaller schools where the number of interested or capable students is inadequate for a full-time class, the measures to provide advanced course work for an exceptional student may take the form of a regular project.

In a number of schools, administrators feel that the trend toward individualized programming has satisfied to a considerable extent the need for extensive special programs for the gifted. In a situation wherein all the resources of a school are available to every child and an ungraded educational program exists, many stimulating and broadening materials, activities, and experiences are open to the gifted student. Ideally, if truly individualized programs existed, the need for special programs – for gifted and ungifted alike – would largely disappear.

From the above and other considerations, the following conclusions can be drawn:

1. The level of state funding of $5 per year per gifted student is sufficient to provide only a program of very limited scope; it is insufficient to provide a continuing educational program for gifted students.

2. The regular projects provide a mechanism for stimulating awareness of gifted students and recognizing them in tangible ways.

3. The regular projects appear to be quite imaginative; considerable ingenuity has been exercised in programming to the funding level and stretching funds.

4. The regular projects provide both a stimulus and nucleus for local action.

5. Although supplemental local support for the state-funded program is provided, such support programs are seldom formalized.

6. The impact of the special supplementary programs was not assessed.

Recommendations

From the nature of the existing Gifted Student Program the following recommendations appear reasonable.

1. Funding for the Gifted Student Program, as it presently exists, should not be included in the apportionment formula. Although recognition of the gifted child's needs is an essential part of any comprehensive education program, the magnitude of the present state-supported program is so small that there is a high probability of the program's losing its identity if included in the apportionment formula. In addition, the per-student entitlement for the gifted, under the present ground rules, is too small to be treated with a meaningful weighting factor.

2. The presently existing program should be continued. The present program serves a very limited purpose–generating awareness and interest in the gifted child and providing recognition both to him and to others of his special status. For achieving these limited objectives the present program is successful and economical. The requirement of submitting a proposal is desirable as it focuses attention on the program (and the gifted child) to a greater degree than does the extent of the funding.

3. A meaningful study should be undertaken to determine the type of gifted student program which is most appropriate to the State of Washington in terms of objectives, desired student outcomes, relative priority with respect to other educational programs, relationship to growth in individualized instruction (and other innovations) and cost. If there is serious interest in the special education of the gifted child–in contrast to recognition–such a study should be made. Particular attention should be paid to the gifted student programs in Illinois, California, Pennsylvania, Connecticut, and possibly North Carolina, as these states have significantly more

sophisticated gifted student programs than does the State of Washington. (We are of the belief that a "recognition" or "awareness" program can be successfully operated on a quite meager budget. However, to provide a meaningful educational program, we believe a "quantum jump" in funding would be necessary. This is suggested by the San Francisco program which is briefly described in the Appendix.)

Table 1

REGULAR PROGRAM CHARACTERISTICS GIFTED STUDENT PROGRAMS

	Mentions
Exposure to New Ideas and Experiences - 65	
Seminars and/or Field Trips	31
Discussion Groups	10
Attending Performances	5
Activities on College Campuses	5
Cultural Encounters	4
Providing Demonstrations for Others	4
Occupational Possibilities	4
Visiting Business or Industry	2
Creative Activities—Projects - 38	
Science and Mathematics	10
Art	5
Humanities and Social Studies	5
Communication	5
Literary	4
Drama	3
Music	3
Plays and Performances	2
Community	1
Extensions of Regular Curriculum - 32	
Art	12
Music	8
Science	5
Drama	1
Skills	1
General	5
Involvement of Non School People - 24	
Community Experts and Professionals	19
College Personnel	5

Table 1–Continued

Facilities and Materials - 11	Mentions
Learning Resources	7
Calculators	3
Enrichment Center	1
Miscellaneous - 23	
Individualized Instruction	9
Small Group Activities	4
Identification Techniques	5
Teacher Training	4
Curriculum Development	1

Table 2

SPECIAL SUPPLEMENTARY PROGRAM CHARACTERISTICS GIFTED STUDENT PROGRAMS

		Mentions
Teacher Training		7
Creative Activities		4
Fine Arts	2	
Communication	1	
Planning (PERT)	1	
Involvement of Non School People		
Community Experts and Professionals		4
New Ideas and Experiences		3
Cultural Encounters	2	
Off-Campus Activity	1	
Facilities and Materials		2

APPENDIX

Appendix

SUMMARY: SAN FRANCISCO UNIFIED SCHOOL DISTRICT PROGRAMS FOR THE GIFTED

1. Funding:

State of California		ca.	$185,000[1]
San Francisco USD		ca.	665,000
	Total		$850,000

2. Students:

Total in District	ca.	95,000	
Total in Programs for the Gifted	ca.	3,700	(3.9%)

3. Selection Criteria:

    98 percentile in individual IQ test[2]

    Up to 5% may be selected by recommendation of a committee.

    Summer program to identify candidates from economically deprived children. Up to 2% (about 400) may be chosen this way.

    Written approval of parents.

---

[1] The State of California supports local, gifted student programs to the extent of $60 per student per year up to 3 percent of the total enrollment. In addition, $40 for selection and testing expense is alloted for each new student entering the program.

[2] The state criteria includes scoring in the 98 percentile on a group IQ test. At the persent time, however, San Francisco USD is not administering group IQ tests.

4. Program Characteristics:

Independence of child in learning is the major objective.

Part time; children are released from regular classes the equivalent of 5-40 minute periods per week.

Teachers are specially trained and permanently assigned.

Teachers have considerable autonomy.

Teachers are rotated to different classes annually so that grouped children are exposed to different faces, subject areas and experiences.

Teachers must set objectives in behavorial terms - these are the basis of program evaluation. Copies are provided students, parents, and school principals.

WASHINGTON STATE PUBLIC SCHOOL

TEACHER AND ADMINISTRATIVE PERSONNEL

SALARY SCHEDULE AND SALARY TRENDS

WASHINGTON STATE PUBLIC SCHOOL TEACHER AND ADMINISTRATIVE PERSONNEL SALARY SCHEDULE AND SALARY TRENDS

Introduction

This paper gives information on salary schedule trends and salary trends of teachers and administrative personnel of public schools throughout the State of Washington. Trends for teachers' salary schedules are for 11 school years, beginning with the 1959-60 school year and ending with the 1969-70 school year. Salary trends for teachers and administrative personnel are for four school years, beginning with the 1966-67 school year and ending with the 1969-70 school year.

Teachers' salary-schedule trends are presented mainly in terms of maximum and minimum salary schedules, and salary trends for teachers and administrative personnel are presented mainly in terms of averages. Salary schedule trends are categorized by level of preparation, experience, and school district size group. Salary trends are categorized by position and school district size group. The levels of preparation and position titles are the same as those used by the Washington Education Association, but the school district size groups are defined differently.

The 321 school districts are classified in one of nine school district size groups, based on their 1968-69 full-time enrollment. The school district size groups and the number of districts within each group are as follows:

Size Group	Enrollment Range	No. of School Districts In Range
1	Greater than 20,000	6
2	10,000-19,999	9
3	5,000- 9,999	20
4	2,600- 4,999	30
5	1,600- 2,599	25
6	1,000- 1,599	28
7	500- 999	60
8	200- 499	65
9	Less than 200	78

Some comparisons between Washington State salary schedules and salaries and those of the Far West and United States are included in this paper. These comparisons are made for school districts with an enrollment greater than 6,000. The 28 school districts in the state which had a 1968-69 enrollment greater than 6,000 are listed in Table 18.[1]

The trend figures included in this paper show an inflation trend for comparison purposes. This inflation trend is based on personal consumption expenditure which includes goods, services, durables, and nondurables.

The information in this paper is based mainly on data furnished by the Special Levy Study staff. State salary schedule and salary data were taken from WEA reports for the last 11 school years. National salary schedule and salary data for 1969-70 school year were taken from NEA Research Reports 1969-R13, 1970-R2, and 1970-R3.

---

[1] The statistical material which accompanies this report is to be found grouped together at the end of the text.

Conclusions

Salaries of Washington State certificated classroom teachers and other certificated personnel compare favorably but are not out of line with certificated personnel salaries in other states and generally in the West. Increases for administrative salaries are approximately 4 percent higher than increases for classroom teachers. The percent increase in salaries for the last four years has been approximately double the cost-of-living increase. Classroom-teacher salary increases are approximately equal to salary increases of other professions for the last six years.

Scheduled teacher salaries are highest for size group 1 (the largest school districts) and decrease with each succeedingly smaller size group. The percent increase in salary schedules over the last 11 years is approximately equal for school districts of different sizes, and the relative position of larger school districts to smaller districts is basically the same in 1969-70 as it was in 1959-60.

The average student-teacher ratio of 23.4 has been relatively constant over the last four school years. A slight downward trend is noted, but it is less than one pupil per teacher. The average number of pupils per classroom teacher holds fairly constant for the six largest school district size groups and then drops substantially to 15.4 for the smallest school-district size group. The definite correlation of salaries with size of school districts does not occur for numbers of pupils per classroom teacher.

Both large and small school districts have higher teacher salary costs per pupil than the cost for the intermediate size districts. This cost is higher for the larger school districts because of higher salaries. It is higher for smaller school districts because the lower student-teacher ratio more than compensates for lower salary costs.

The percent turnover for certificated personnel is fairly constant (approximately 15 percent) for school district size groups 1 through 5, increases (18-28 percent) for size groups 6 through 8, and then increases substantially (43 percent) for size group 9. Percent turnover has remained nearly constant for the last four school years.

Salary Schedule Highlights

The averages of maximums of scheduled teacher salaries for school districts with larger enrollments generally have higher scheduled teacher salaries than those of the smaller school districts (see Figure 18). The 11-year percent increase in the maximums was 60 percent of the 1959-60 maximum for both school district size groups 1 and 9, while inflation increased by only 30 percent. Thus, it may be concluded that the percent increase in the maximums of scheduled teacher salaries over the last 11 years is approximately equal for school districts of different sizes, and the relative position of school districts with larger enrollments to those of smaller enrollment is approximately the same in 1969-70 as it was in 1959-60. Averages of maximums and minimums of scheduled teacher salaries for each school district size group are shown in Figures 1-9.

Averages of maximums of scheduled teacher salaries increase as the level of preparation increases (see Figure 16). The percent increase over the 11-year period for highest level of preparation–six years with master's degree, five years with bachelor's degree–are 73 percent, 69 percent, 68 percent, 62 percent, and 48 percent, respectively. The conclusion is that teachers who improve upon their level of preparation can expect a greater percent increase in their salaries. Averages of minimums and maximums of scheduled teacher salaries for each preparation level are shown in Figures 11-15.

Comparison of Washington State classroom scheduled teacher salaries with those of the Far West and United States for 1969-70 shows that the median for Washington is less than the median for the Far West but greater than the median for the United States for bachelor's degree minimum, master's degree, and maximum scheduled salary for highest preparation level (see Figure 17 and Table 9). The median values and ranges increase as the level of preparation increases. Washington scheduled classroom teacher salaries are not the lowest nor are they the highest when compared with those in the Far West as a whole and the United States. A comparison of superintendents' and assistant superintendents' maximum scheduled salaries gives basically the same picture as that for the classroom teachers (see Figure 18 and Table 10).

Ranges of maximum scheduled salaries for supervising principals for 1969-70 are approximately the same for senior high, junior high, and elementary principals. The ranges increase as the size of the region increases. The maximum scheduled salaries for supervising principals are not the highest nor the lowest when compared with the Far West and the United States, with the exception of elementary school principals, where the Washington high is equal to the Far West high (see Figure 19 and Table 12).

Ratios of average maximums of scheduled teacher salaries for Washington State to the United States are greater than 1.00 for the last four school years for master's degree, highest level of preparation, and six years of preparation, but they are less than 1.00 for bachelor's degree (see Figure 20). Ratios of minimums are all greater than 1.00 for the last four school years, with the exception of the 1968-69 ratio for six years' preparation (see Figure 21). Average ratios of average maximums of scheduled teacher salaries for highest, six years, master's and bachelor's degrees are 1.05, 1.00, 1.09, and 0.94, and for minimums they are 1.08, 1.00, 1.09, and 1.02. One would expect the ratios of average maximums for bachelor's degree to be low because for standard certification, Washington requires a fifth year of college, which means that teachers move to the next level of preparation in three to six years. Therefore, the years of experience at the bachelor's-degree level would be six years or less, which would result in lower maximums for Washington at this preparation level. Generally, one would conclude from these ratios that teacher-salary schedules for Washington State are higher than the average for the nation.

Salary Highlights

The average classroom salary has increased from $7,260 in 1966-67 to $9,338 in 1969-70, an increase of 28.6 percent. During this same period, the average certificated personnel salary increased from $7,670 to $9,872, an increase of 28.7 percent. The certificated personnel, which includes classroom teachers, have had a percent salary increase since 1966-67 which is approximately double the 15 percent increase due to inflation.

Generally, the descending order for salaries paid to certificated personnel in each school district size group is superintendent, assistant superintendent, senior high school principal, junior high school principal, elementary school principal, director-supervisor-consultant, senior high school teacher, junior high school teacher, and elementary school teacher. The percent increases in the average salaries of each of these categories from 1966-67 to 1969-70 are 31 percent, 29 percent, 33 percent, 26 percent, 32 percent, 22 percent, 27 percent, 25 percent, and 27 percent , respectively. The average percent increase, 30.2 percent for certificated administrative personnel is approximately 4.0 percent higher than the percent increase for certificated classroom teachers. Averages of certificated personnel salaries for each school district size group are shown in Figures 22-31.

Average salaries of all classroom teachers for a particular position are usually highest for school district size groups with the largest enrollment, and decrease as the enrollment decreases (see Figure 42). The only variation in this order is for director- supervisor-consultant and principals in school district size group 2; these have higher average salaries than their counterparts in school district size group 1. The percent increases for all classroom teachers over the four-school-year period 1966-67 through 1969-70 for school districts size groups 1 through 9 are 29 percent, 31 percent, 28 percent, 29 percent, 28 percent, 26 percent, 27 percent, 27 percent, and 24 percent, respectively, of the 1966-67 average salaries. The percentages show that the percentage increase of average salaries for school districts with larger enrollments is approximately 2 percent higher than it is for the districts with smaller enrollments. The same picture emerges in the case of average salaries for all certificated personnel since the majority of the certificated personnel are classroom teachers (see Figure 41). The conclusion drawn from this information is that average salaries for larger school districts are higher and the percent increase in average salaries is a little higher for the larger school districts.

The ratios of average salaries of administrative and supervisory personnel, and classroom teachers to average salary of all classroom teachers are shown in Table 12. An average superintendent's salary is approximately 1.88 times that of a classroom teacher, and an average principal salary is approximately 1.62 times that of a classroom teacher. The comparison of ratios of elementary, junior high and senior high school teachers shows an increase from 0.96 to 1.05. This increase is due to an increase in level of preparation and not to different salary schedules; there is only one salary schedule for classroom teachers in each school district. The differential between administrative and supervisory personnel decreases as the size of the school district decreases but remains constant from one school year to the next.

The average ratios of pupils to teachers and pupils to certificated personnel are 23.43 and 20.05, respectively (see Table 13, parts d and e). These figures remain relatively constant from 1966-67 through 1969-70, with a slight downward trend of less than one pupil per teacher over the four-year period. But the average pupils per classroom teacher and average pupils per certificated personnel do decrease for the school districts size groups with smaller enrollments. The average pupils per classroom teacher for size groups 1 through 6 (23.24–23.41) hold fairly constant and then drop one to 2 students for size groups 7 and 8 (21.81–20.02) and another 3 to 4 students for size group 9 (15.36) for the 1969-70 school year.

The percent turnover for certificated personnel is fairly constant (15.01–15.35 percent) for school district size groups 1 through 5, increases (17.68–27.85 percent) for size groups 6 through 8, and then increases substantially (42.40 percent) for size group 9 (see Table 13, part f). There is no noticeable trend in the percent turnover for the 4 school years considered. The average percent turnover for the 4 years is 16 percent. The high percent turnover in the smaller school districts indicates that these people are probably finding better positions in larger school districts. Table 8 shows the mean amount in dollars for the experience increments in salary schedules. These amounts increase as the size of the school district increases, which is an incentive for people to move to larger districts if there are openings.

The average classroom-teacher and certificated-personnel salary costs per pupil are high for large and small school districts and low for the intermediate size district (see Table 14). For example, in 1969-70 the average classroom-teacher salary cost per pupil was $421 for size group 1, $364 for size group 6, and $499 for size group 9. The teacher salary cost per student is higher for the larger school districts primarily because they pay higher salaries, and it is higher for smaller school districts because there are fewer pupils per classroom teacher. The same is true for certificated-personnel salary cost per pupil. The average classroom-teacher salary cost per pupil has increased $73 or 22.1 percent from 1967-68 to 1969-70 and the average certificated-personnel cost per pupil has increased $96 or 23.5 percent. These costs have increased similarly for each school district size group.

Since classroom teachers are certificated personnel, it is of interest to look at the differences of salary costs per pupil (see Table 14, part c). This difference gives an indication of the administrative salary cost per pupil. This cost increased from $78 for 1967-68 to $101 for 1969-70, an increase of $23 or 29.5 percent. The average administrative salary cost per pupil increased from 23.6 percent to 25 percent of the average classroom teacher salary cost per pupil for the 3 school years considered. A look at the indicated administrative costs differential per pupil for 1969-70 by size of school district shows that size groups 1 and 2 have the highest costs ($123, $114), size groups 3 through 8 have costs in the middle of the range ($91–81), and size group 9 has the lowest administrative cost differential ($58). This reflects both the higher salaries in the larger school districts and the fact that in the smaller school districts, the classroom teachers may assume some of the administrative tasks.

Average salaries of classroom teachers compare favorably with average salaries of draftsmen, nurses, and secretaries in the Seattle-Everett area, (see Table 14). The percent increase in average salaries for classroom teachers, draftsmen, nurses, and secretaries were 42.2 percent, 23.3 percent, 36.5 percent and 28.6 percent, respectively for the 6 school years 1964-65 through 1969-70. Average 1969-70 salaries were $10,173 for classroom teachers, $9,620 for draftsmen, $8,164 for nurses and $7,124 for secretaries.

Another interesting comparison is to compare the Seattle-Everett average classroom teacher salary with the estimates of Seattle-Everett area budget costs for a family of four (see Table 16). In 1966-67 the average classroom teacher salary was $1,525 above the lower budget costs and $1,505 below the intermediate budget costs. In 1968-69 the average classroom teacher salary was $1,981 above lower budget costs and $1,307 below intermediate budget costs. Budget costs had increased 10 percent from the spring of 1967 to the spring of 1969 whereas average classroom teacher salaries had increased 14 percent from 1966-67 to 1968-69 in the Seattle-Everett area. From it may be concluded that the salary of the classroom teacher is approaching the intermediate budget costs for a family of four.

Average salaries of beginning teachers with bachelor's degrees in Washington State are higher than those in the United States, but lower than those for college graduates with bachelor's degrees entering other professions (see Table 17). On the other hand, the average starting salaries percent increase of 35.4 percent from 1964-65 through 1969-70 for the Washington State classroom teacher is approximately equal to the percent increases for engineering graduates (33.4 percent), business administration graduates (36.3 percent), and liberal arts graduates (38.0 percent).

Study Constraints

WEA points out in their reports that the assigning of position codes to certificated personnel at the local level may be rather arbitrary. It may be that a director in one district may have the same duties and job assignment as a principal or supervisor in another. This would not only change the number of persons falling into the various positions, but would also have an effect upon average salaries.

Another factor affecting average salaries is that of persons working part time. Some years these salaries are prorated by WEA and other years these salaries were adjusted to a full-time basis by WEA.

In any comparison with the Far West, it should be kept in mind that both Alaska and Hawaii are included in this region and the cost of living for these two states is substantially higher than other states.

Several points should be kept in mind when comparing teacher salaries with salaries of people in other occupations.

1. All salary comparisons between groups in this paper are done on an annual basis. No attempt has been made to adjust teacher salaries from 9 or 10 months year to 12 months year.
2. No attempt was made to take into consideration employer-paid fringe benefits. Employer-paid fringe benefits for employees in industry are higher than those received by teachers.
3. Average classroom teacher salaries are compared with estimated budget costs for a family of four. No attempt was made to determine the family characteristics of the average classroom teacher.

Figures and Tables

Figures 1 through 9 show the trends of the averages of minimums and maximums of scheduled teacher salaries for each of the nine school district size groups, and Figure 10 shows a comparison of maximums of scheduled teacher salaries for the nine school district size groups. These figures are based on data given in Table 6 which is summarized from detailed data given in Table 1 through 5.

Figures 11 through 15 show the trends of the averages of minimums and maximums of scheduled teacher salaries for each level of preparation. Figure 16 shows a comparison of the trends of the averages of maximums of scheduled teacher salaries for the five levels of preparation. These figures are based on data given in Table 7 which is summarized from detailed data given in Tables 1 through 5.

Table 8 shows the trends of the mean amount of increments (experience levels) in salary schedules for each school district size group and level of preparation. These values are calculated by subtracting from the maximum salary schedule the minimum salary schedule and dividing the difference by the number of increments for each school district size group and level of preparation. The input data for this calculation are obtained from Tables 1 through 5.

Figure 17 shows a comparison of the 1969-70 range of scheduled salaries for classroom teachers for Washington, Far West, and the United States by level of preparation. This figure is based on data given in Table 9.

Figure 18 shows a comparison of the 1969-70 range of maximum scheduled salaries for central office administrators for Washington, Far West, and the United States. This figure is based on data given in Table 10.

Figure 19 shows a comparison of the 1969-70 range of maximum scheduled salaries for supervising principals for Washington, Far West, and the United States. This figure is based on data given in Table 10.

Figure 20 shows the trend of the ratios of Washington State average maximums of scheduled teacher salaries to the United States average maximums of scheduled teacher salaries for four levels of preparation. Figure 21 shows the same trends but only for the minimums. The data to calculate these ratios are given in Table 7 and NEA Research Report 1969-R-13.

Figures 22 through 30 show the trends of the averages of certificated-personnel salaries by position code for each school district size group. Figure 31 shows a comparison of the trends of the averages of certificated-personnel salaries for the nine position codes. These figures are based on data given in Table 11.

Figures 32 through 40 show the trends of the averages of certificated-personnel salaries by school district size group for each of the position codes. Figure 41 shows a comparison of the trends of the averages of all certificated-personnel salaries for the nine school district size groups. Figure 42 shows a comparison of the trends of the averages of all classroom-teacher salaries for the nine school district size groups. These figures are based on data given in Table 11.

Table 12 shows the trends of the ratios of average salaries of administrative and supervisory personnel, and classroom teachers to average salary of all classroom teachers for each position code and school district size group. The ratio is calculated by dividing the average salary for a position by the average salary for all classroom teachers for a given school district size group, position code, and year. The input data for this calculation are obtained from Table 11.

Table 13 shows the trends of FTE enrollment, number of classroom teachers, number of certificated personnel, pupils per classroom teacher, pupils per certificated personnel, and certificated personnel turnover for each school district size group.

Table 14 shows the trends of the average classroom-teacher salary cost per pupil, average certificated-personnel salary cost per pupil and the difference between these costs for each school district size group. These costs are calculated by dividing the average teacher or certificated-personnel salary by the average pupils per teacher or certificated personnel for a given school district size group and year. The input data for this calculation are found in Tables 11 and 13.

Table 15 shows the average salaries of classroom teachers compared with draftsmen, nurses, and secretaries in the Seattle-Everett area for the school years 1964-65 through 1969-70. The sources for these data are *Occupation Wage Survey Bulletins*, published by the U. S. Department of Labor. The weekly earnings were multiplied by 52 to convert them to annual salaries.

Table 16 gives estimates of Seattle-Everett area budget costs for a family of four for 1967 and 1969. Table 16 also shows the average classroom-teacher salary for the Seattle-Everett area. The family of four includes a 38-year-old employed husband, his unemployed wife, a daughter 8 and a son 13. Total budget costs include food, housing, transportation, clothing, medical care, taxes, and other expenses. Source of the data is *Three Standards of Living for an Urban Family of Four Persons,* published by U. S. Department of Labor.

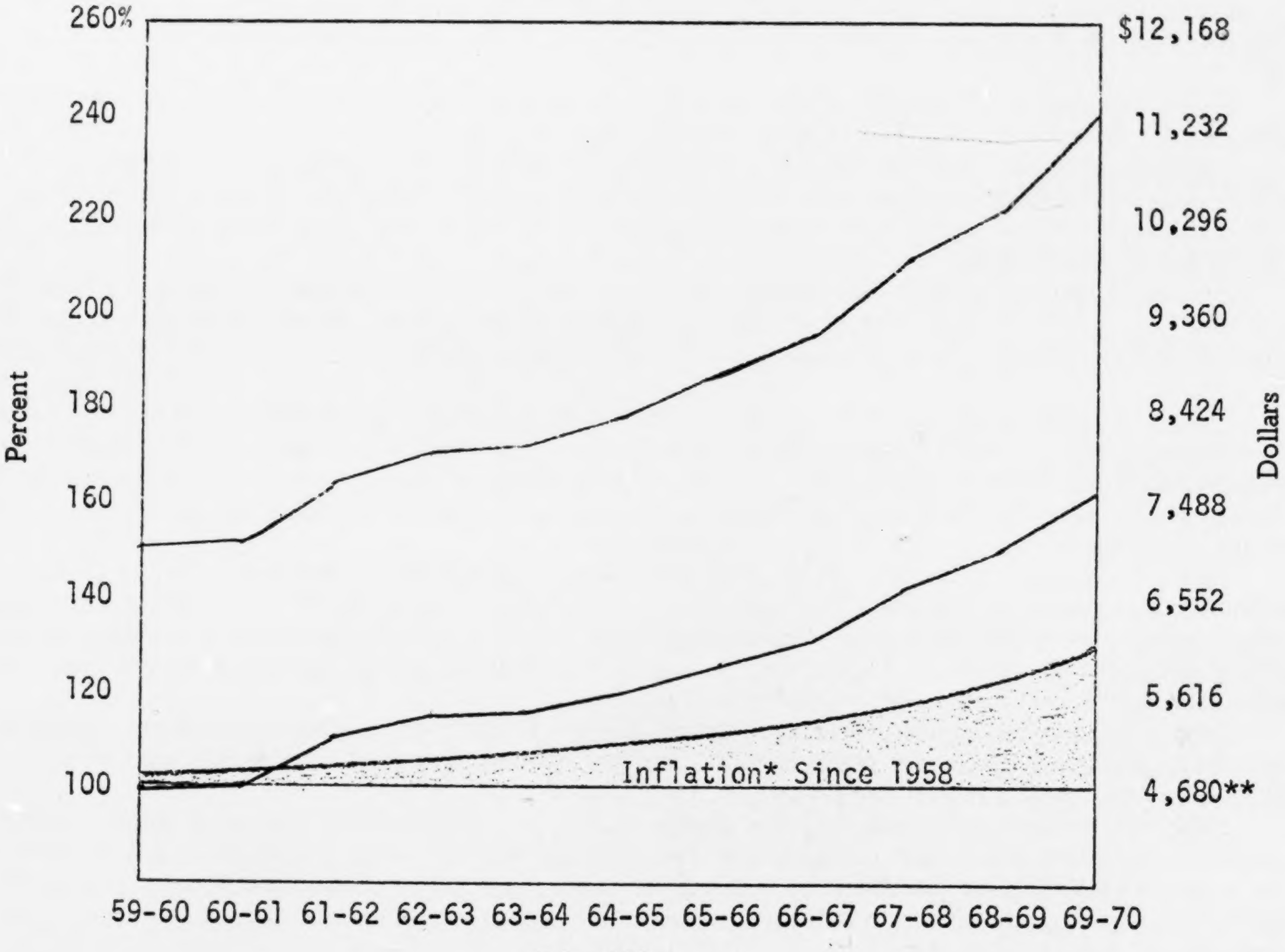
Table 17 shows the average starting salaries of classroom teachers compared with beginning college graduates with bachelor's degrees for some occupations in private industry for the school years 1964-65 through 1969-70. The source for these data is NEA Research Report 1970-R3.

Table 18 lists the 28 school districts in Washington State whose 1968-69 enrollment was 6,000 pupils or more. Data from these 28 school districts are used for comparisons with Far West and United States salary schedules and salaries.

Figure 43 shows the trend of the ratio of the average salary of certificated personnel for Washington State to the average salary of certificated personnel for the United States. The data to calculate this ratio are given in NEA Research 1970-R3.

Figure 1

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 1
(Greater than 20,000 Enrollment)



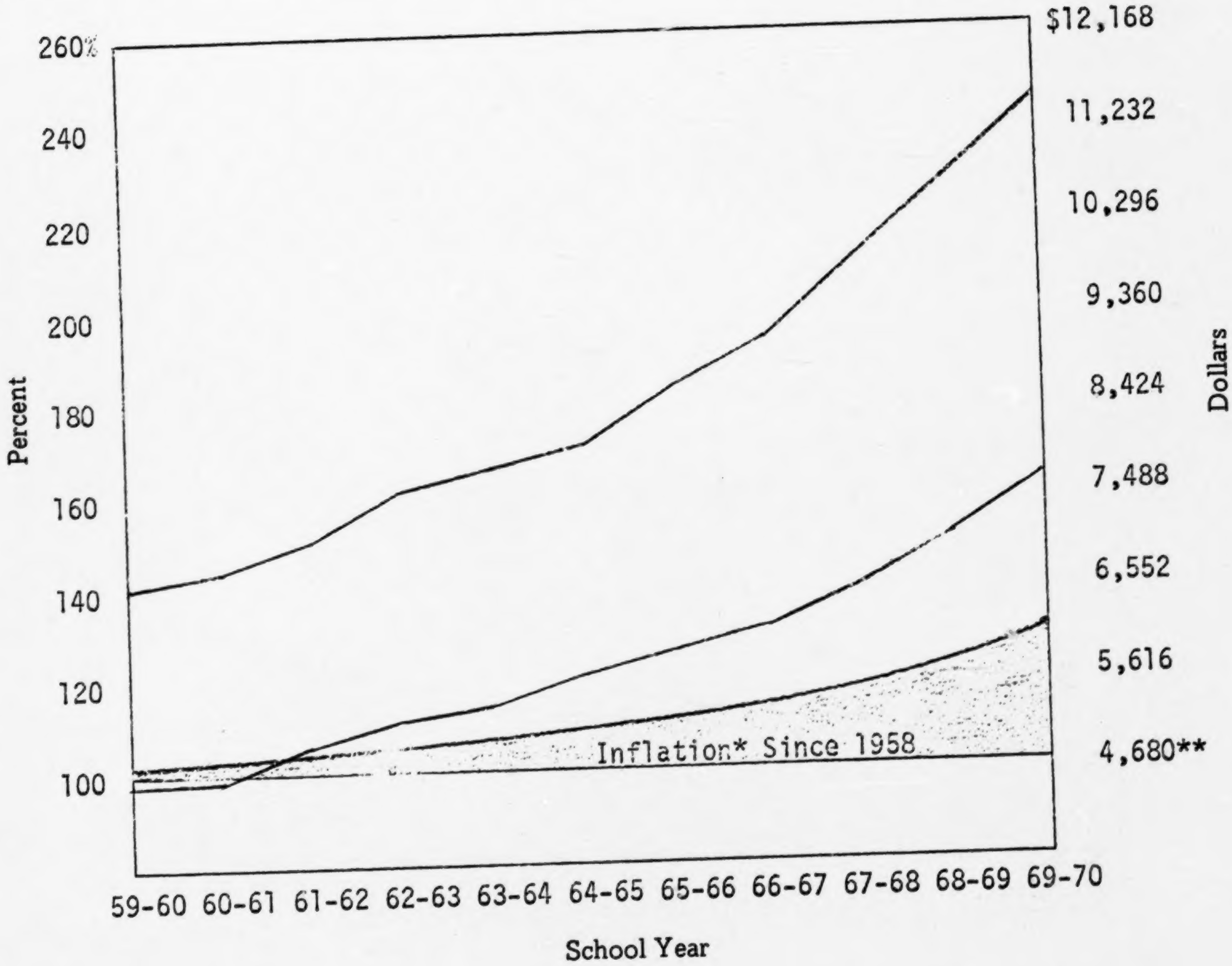
*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 2

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 2

(10,000-19,999 Enrollment)



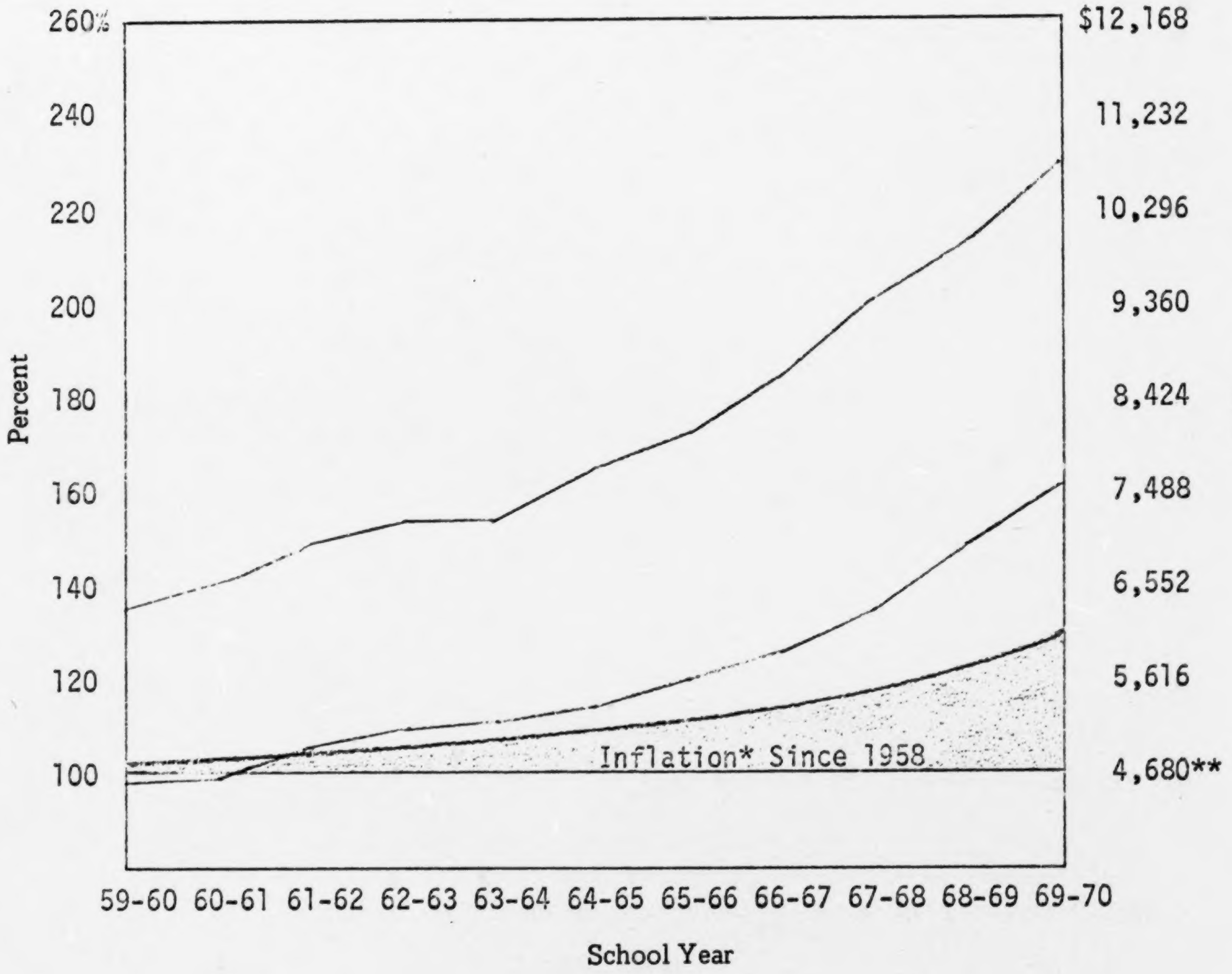
*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 3

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 3

(5,000-9,999 Enrollment)



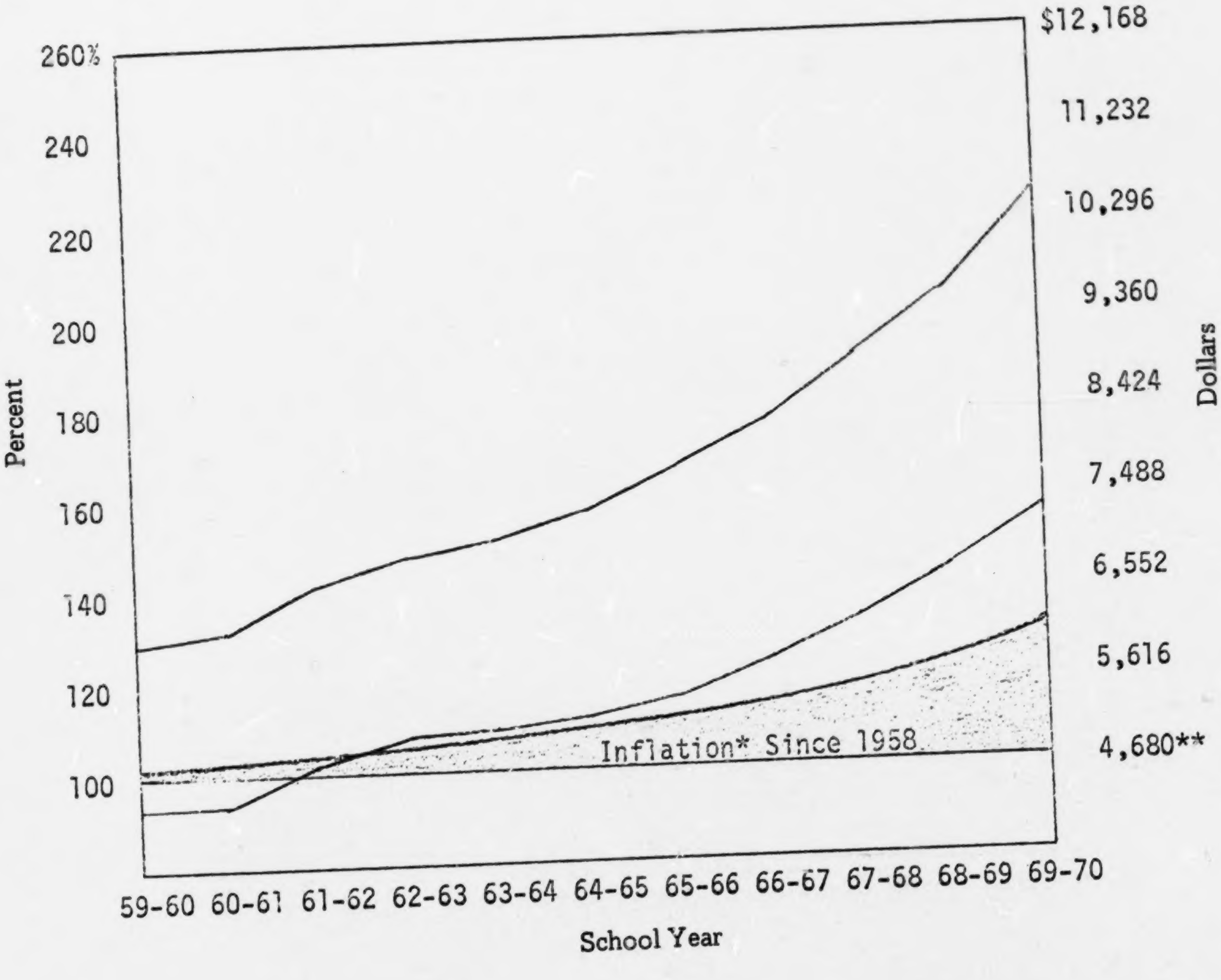
*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 4

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 4

(2,600-4,999 Enrollment)

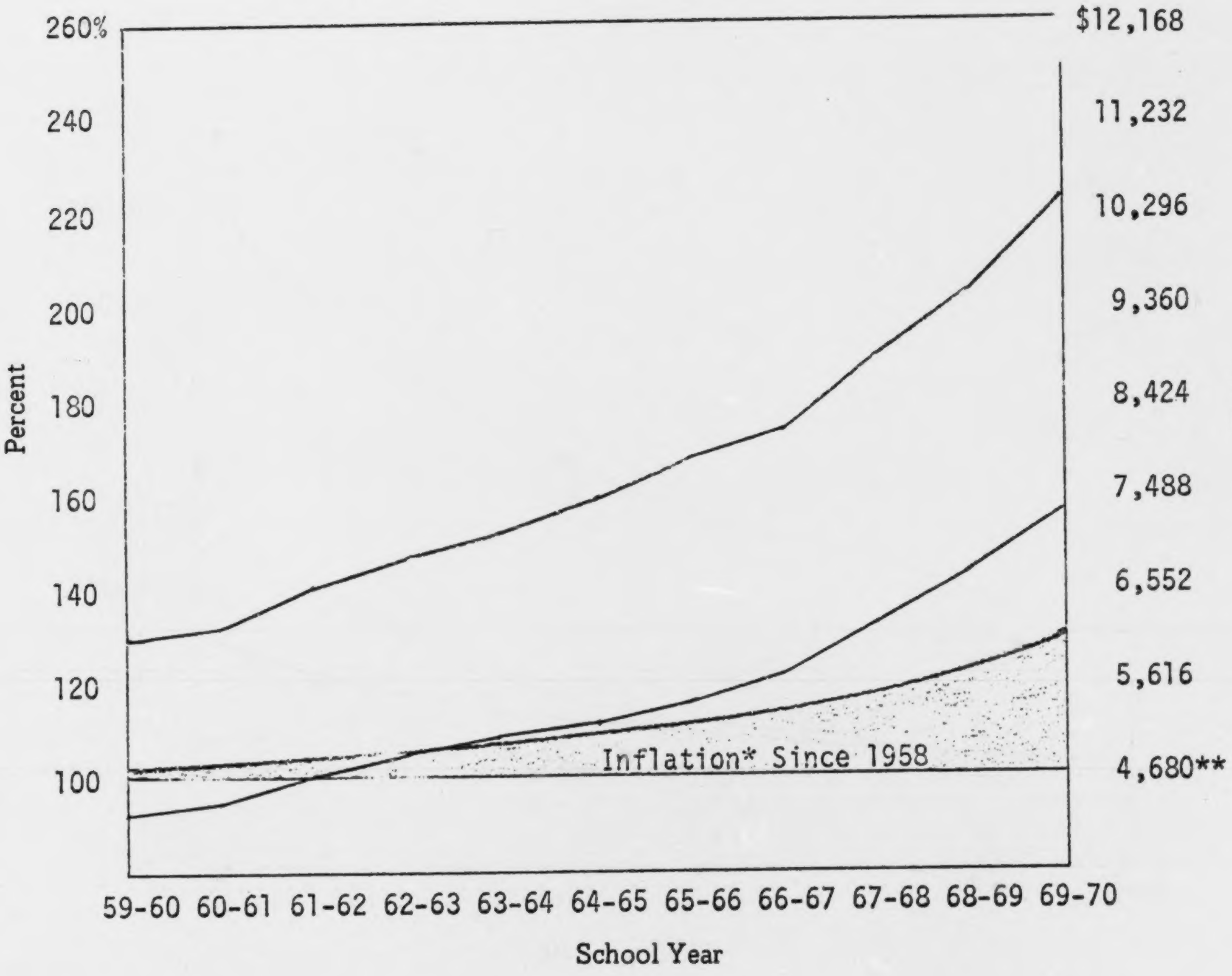


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 5

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 5
(1,600-2,599 Enrollment)



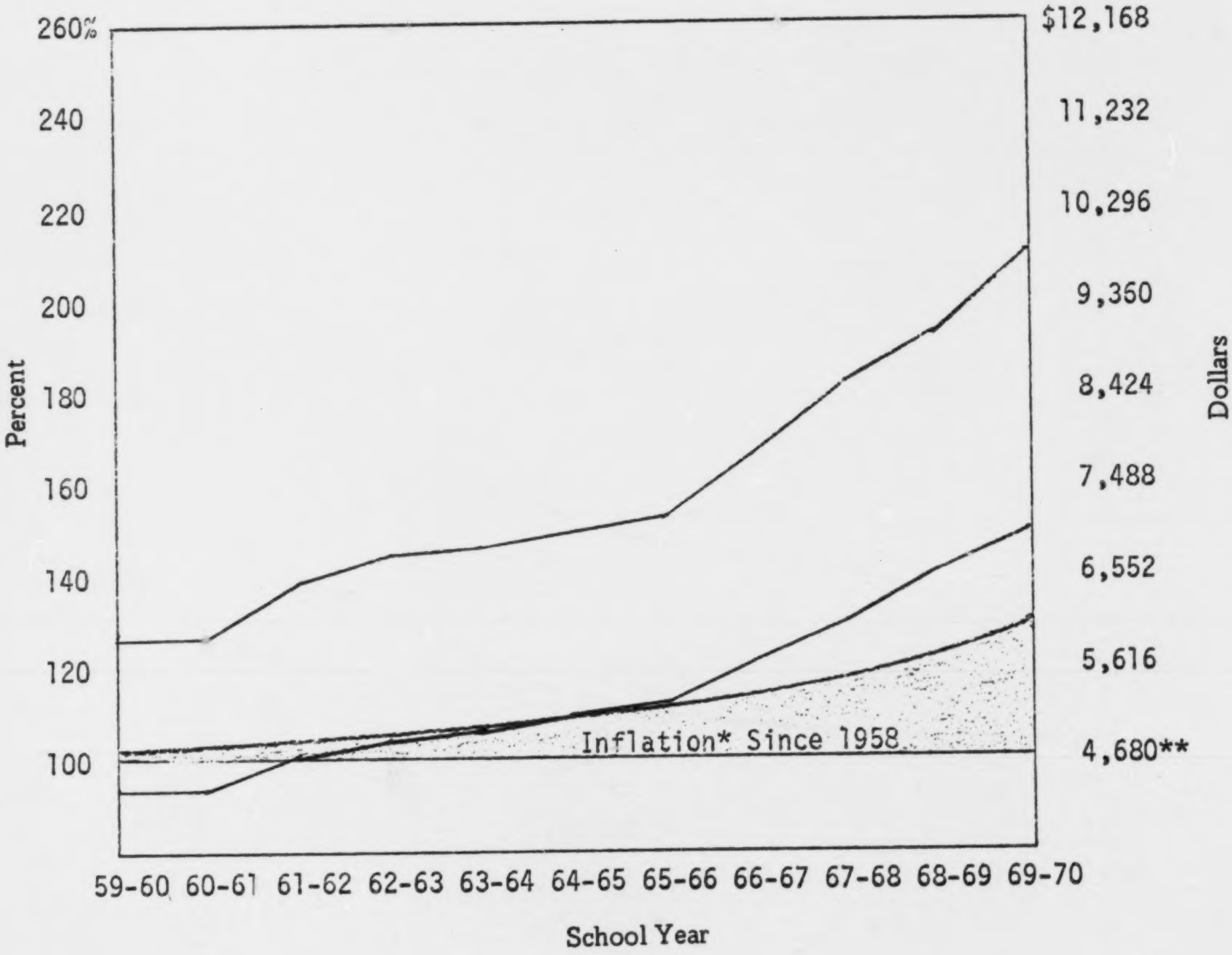
*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 6

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 6

(1,000-1,599 Enrollment)



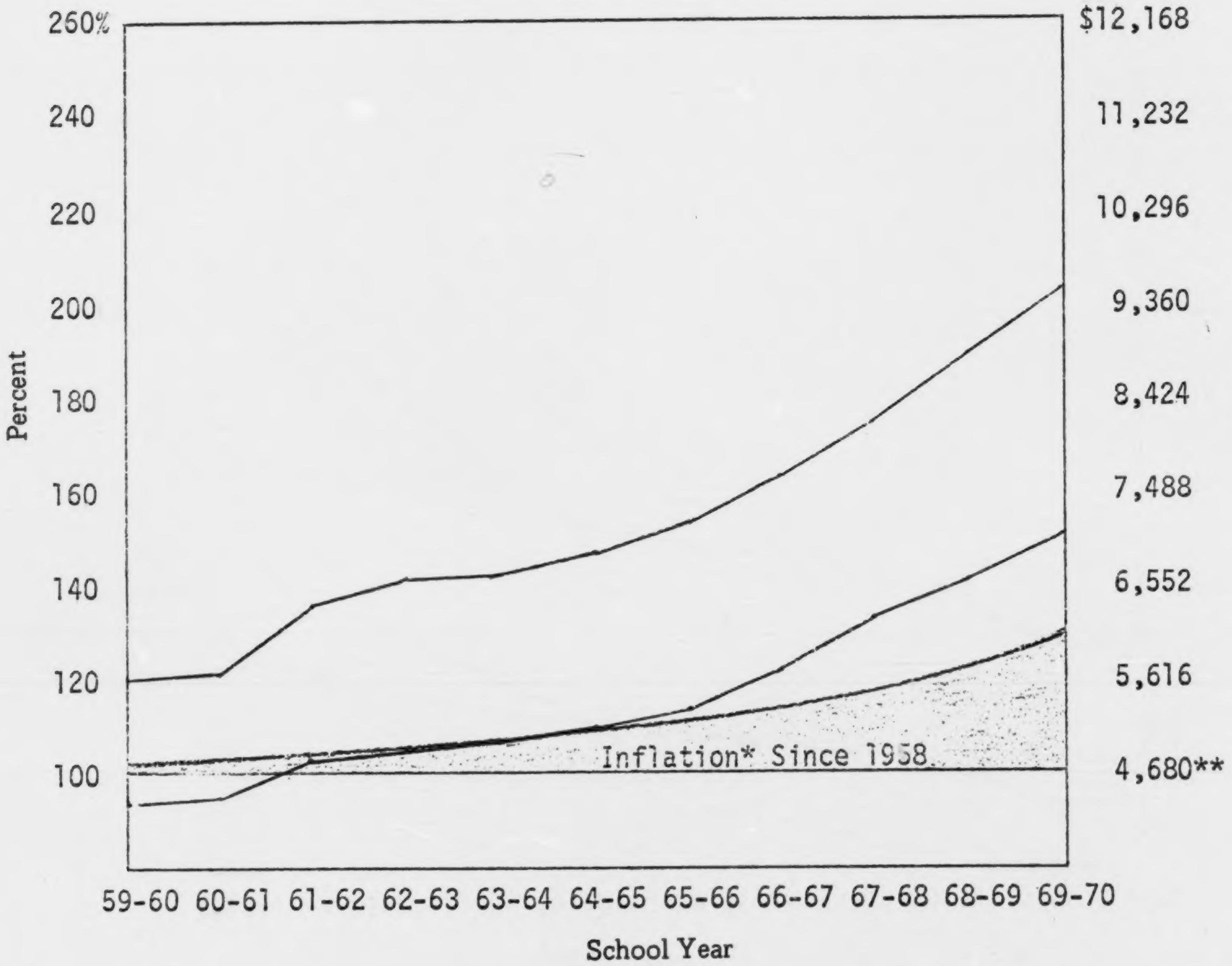
*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 7

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 7

(500-999 Enrollment)



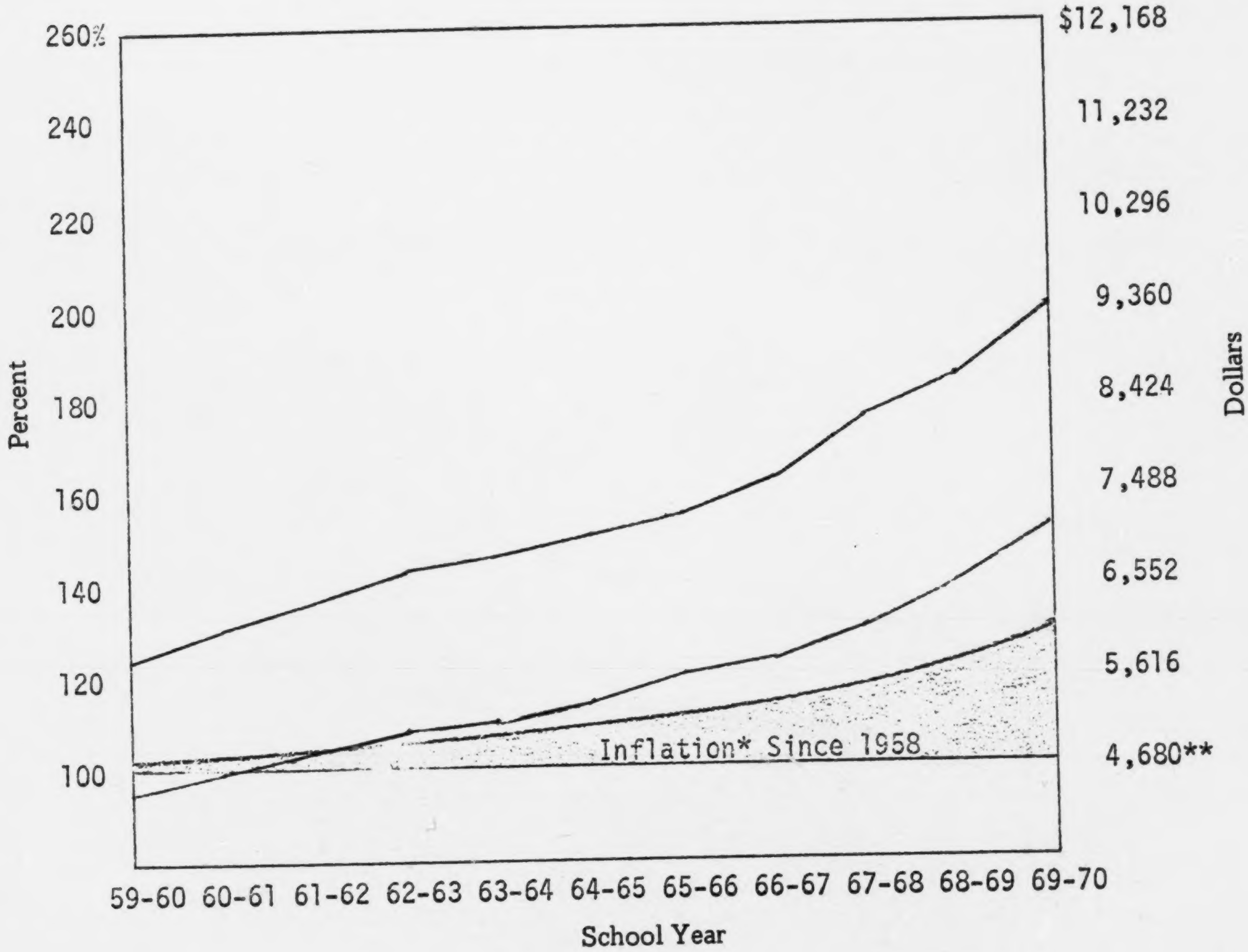
*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 8

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 8

(200-499 Enrollment)

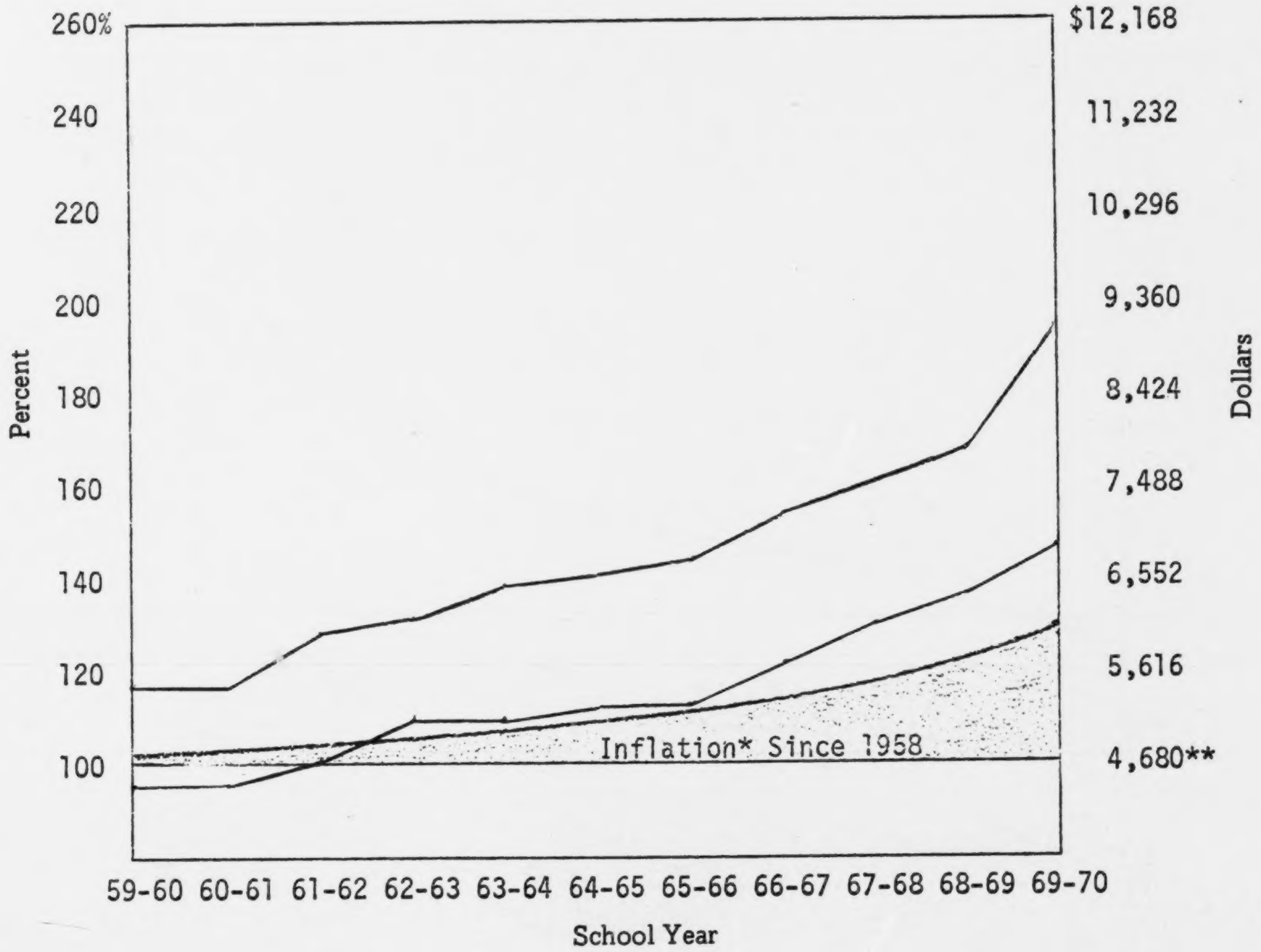


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 9

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SCHOOL DISTRICT SIZE GROUP 9
(Less than 200 Enrollment)

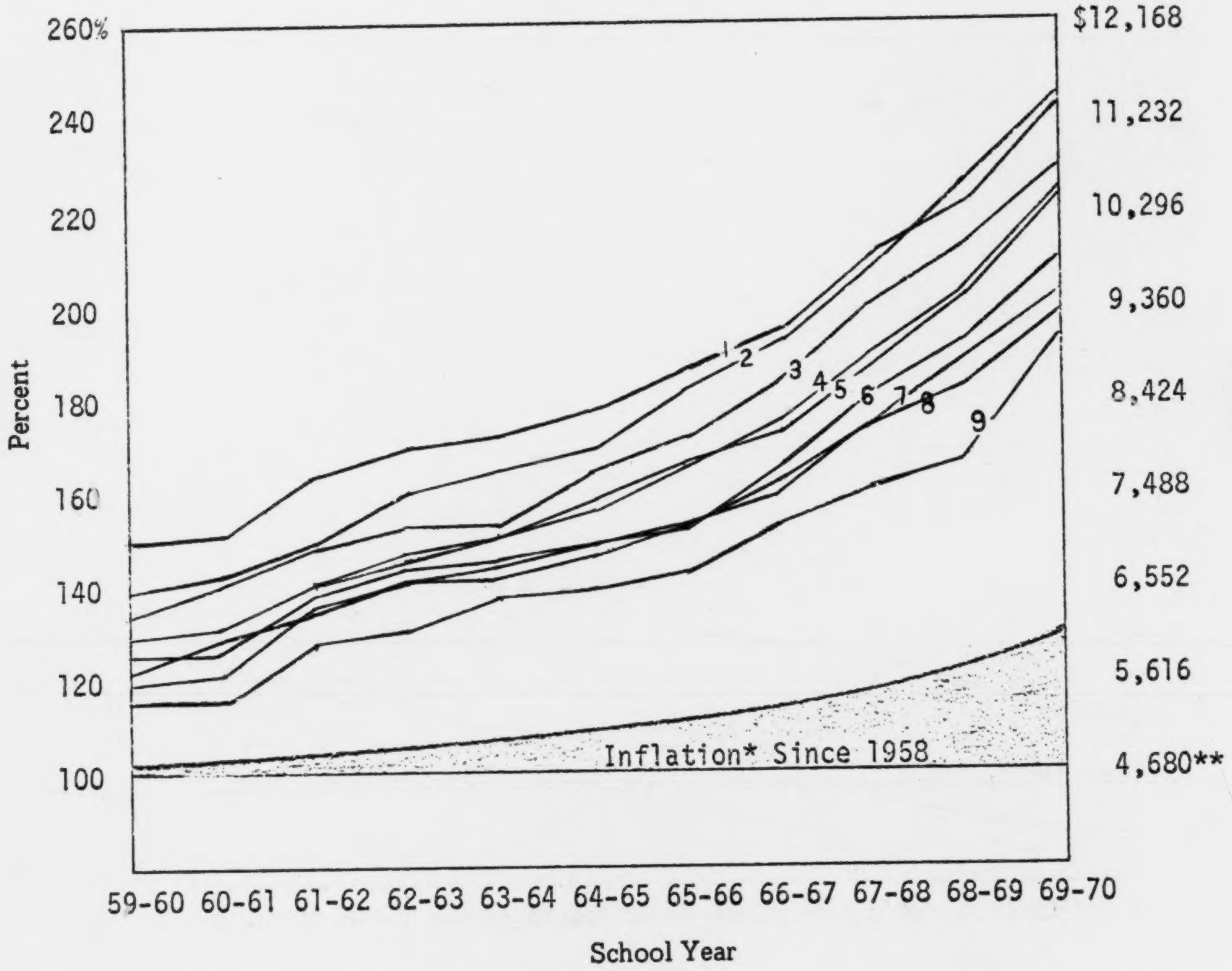


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 10

AVERAGES OF MAXIMUMS OF SCHEDULED TEACHER SALARIES BY SCHOOL DISTRICT SIZE GROUP

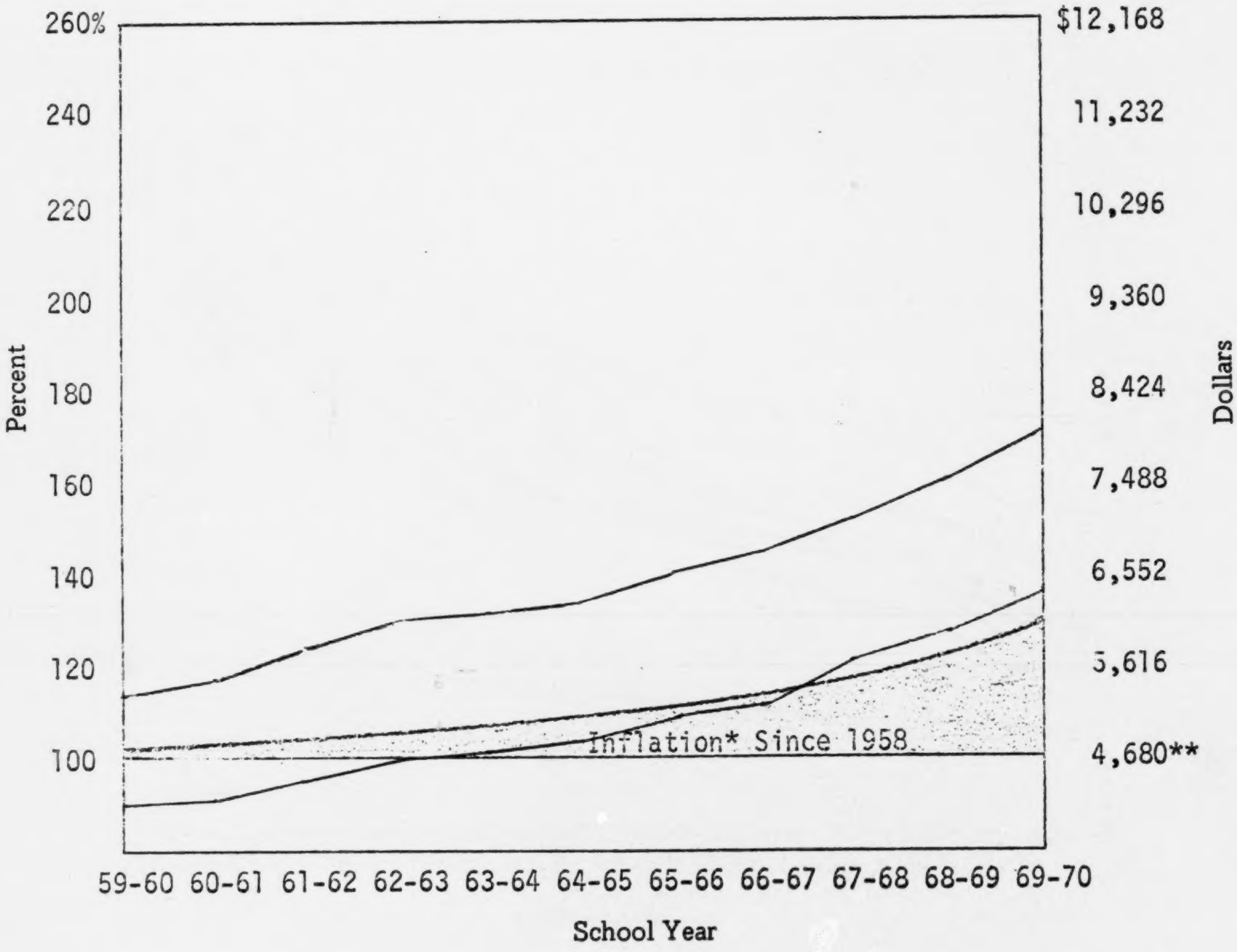


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 11

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR BACHELOR'S DEGREE



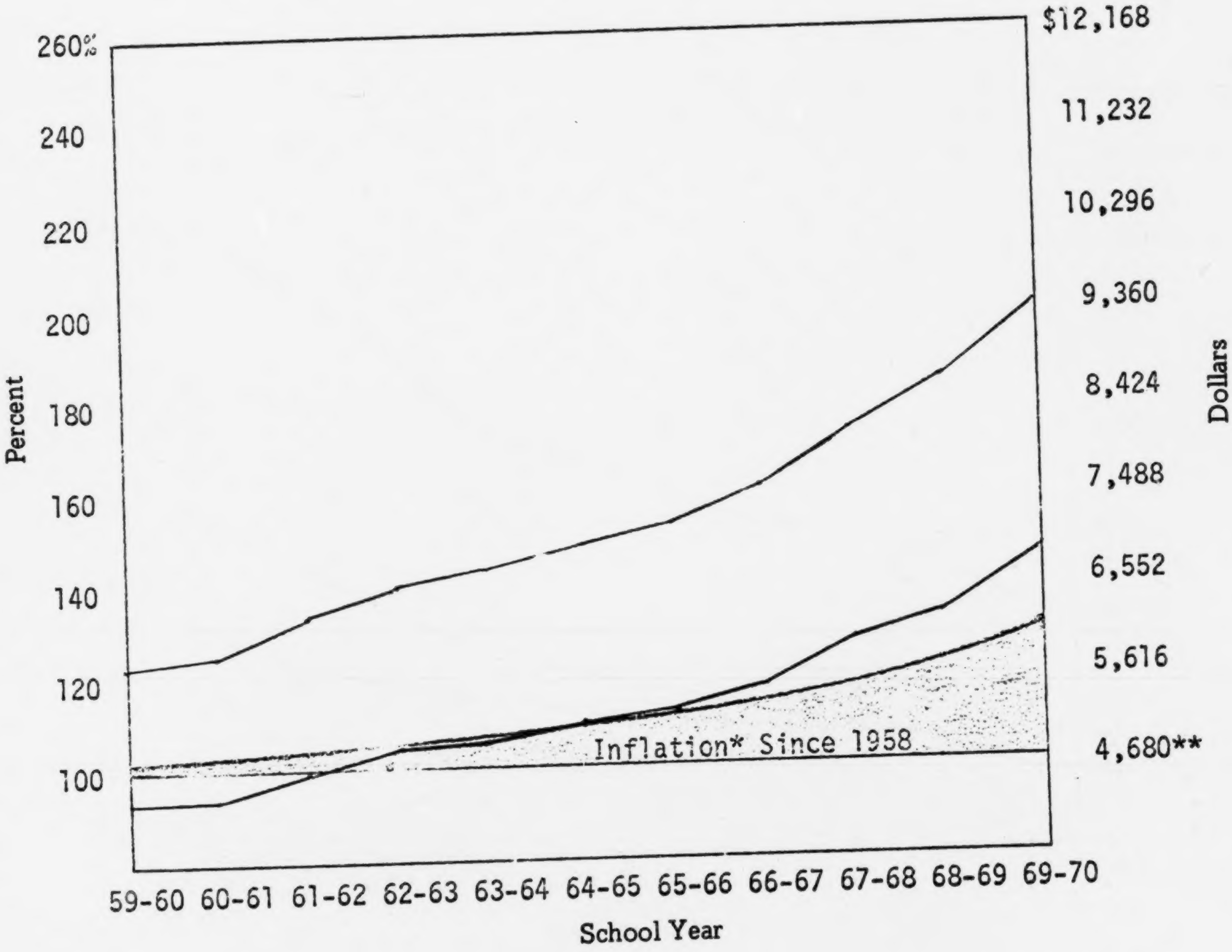
---

*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 12

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR FIVE YEARS OF PREPARATION

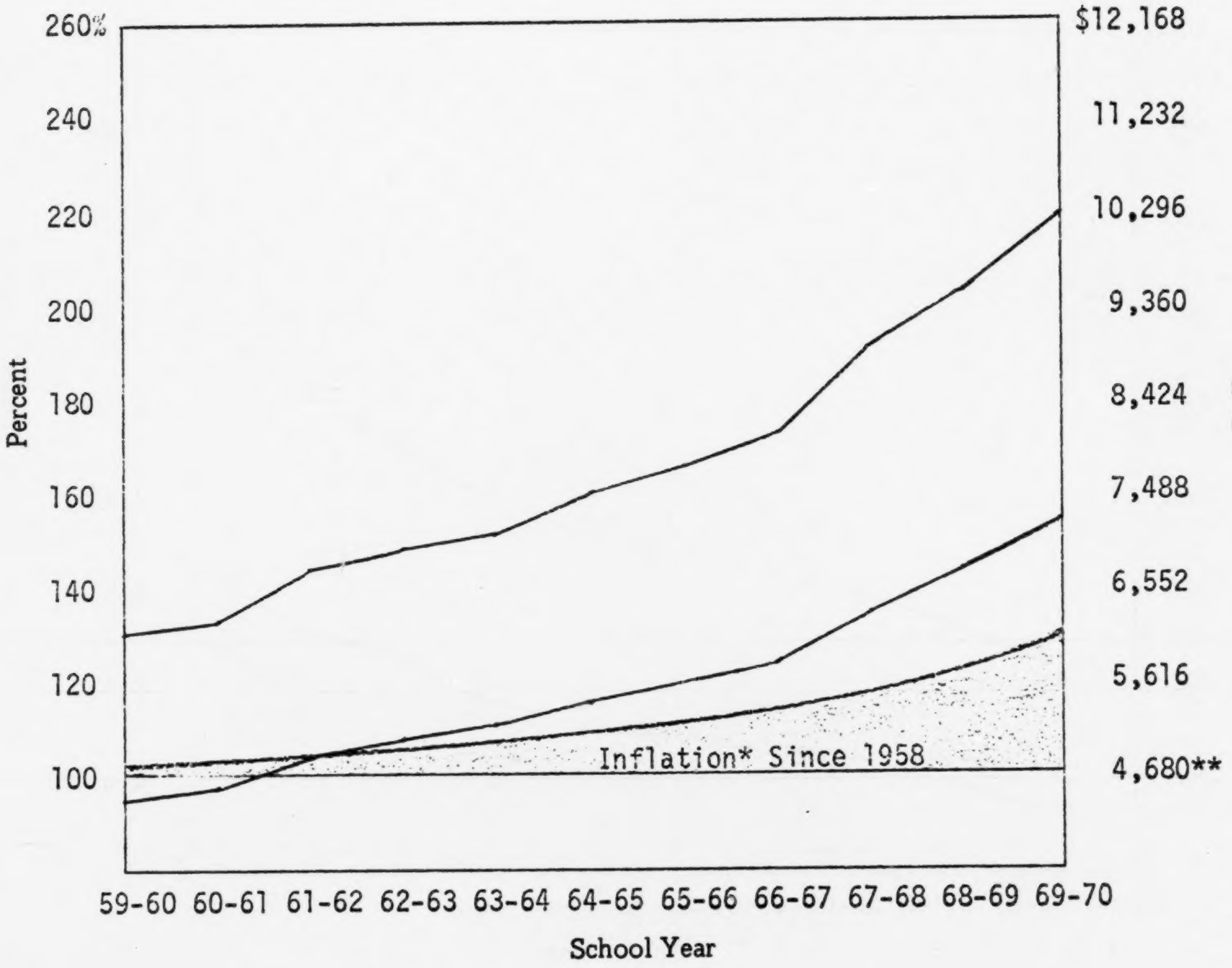


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 13

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR MASTER'S DEGREE

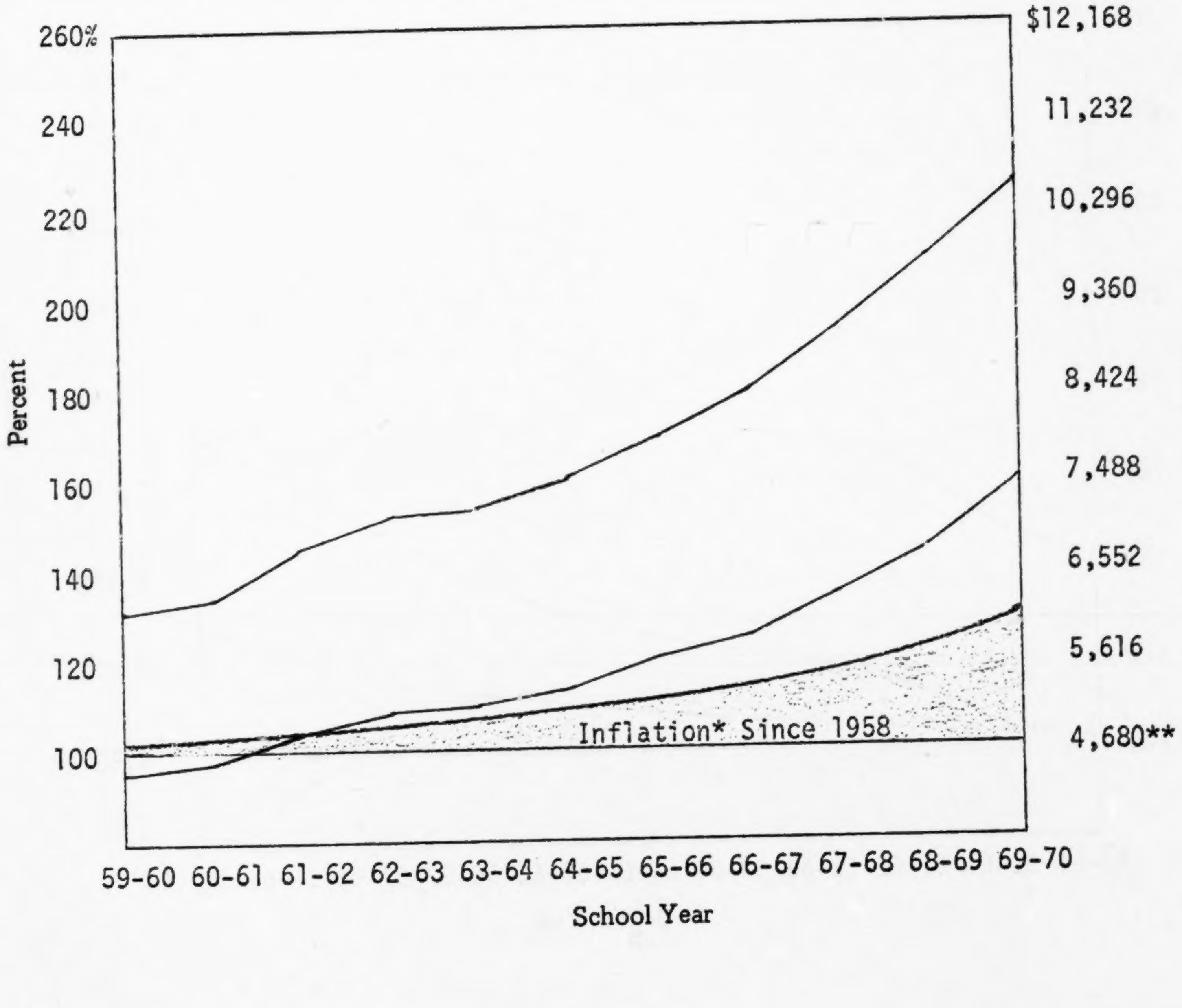


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 14

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR SIX YEARS OF PREPARATION

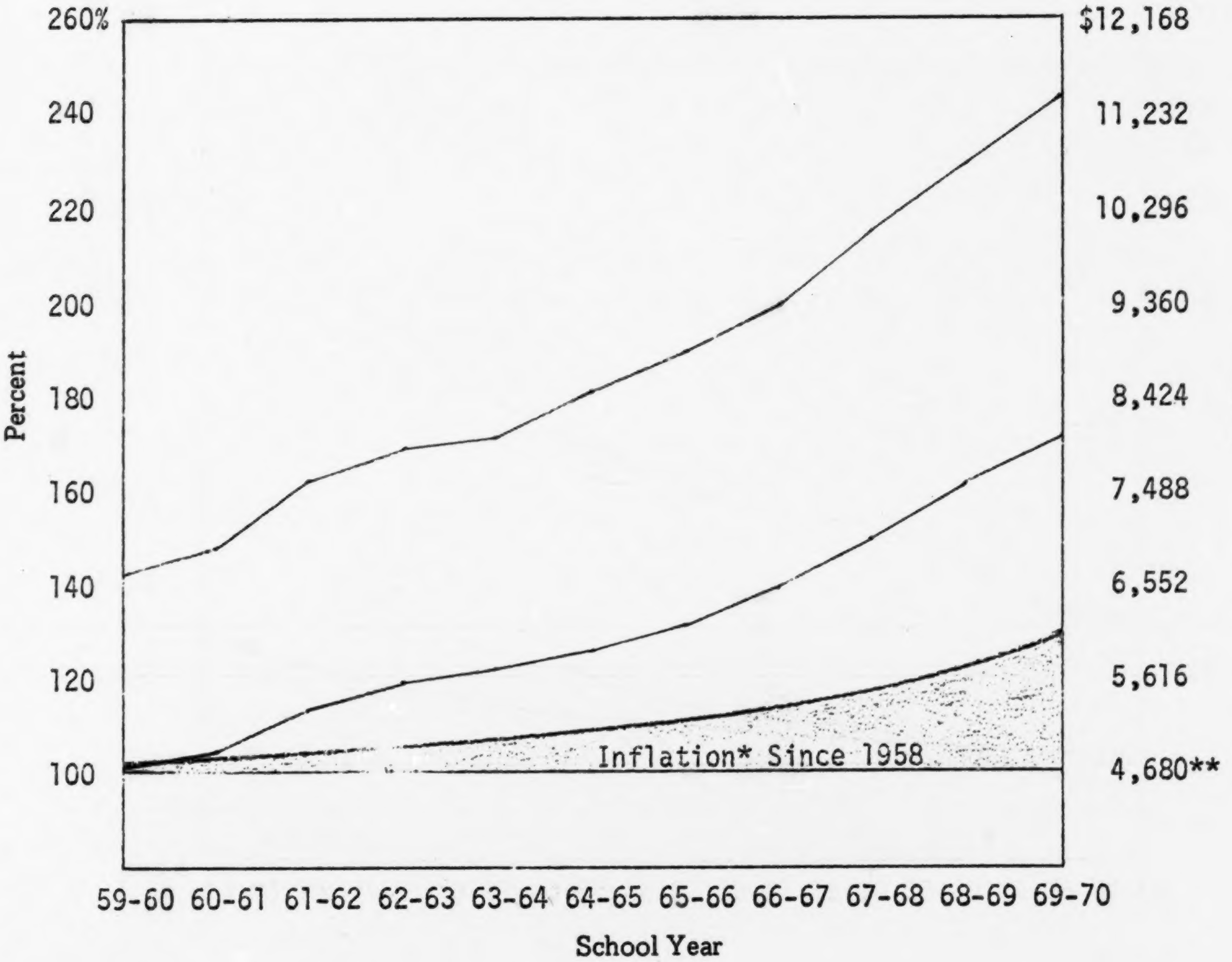


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 15

AVERAGES OF MINIMUMS AND MAXIMUMS OF SCHEDULED TEACHER SALARIES FOR HIGHEST LEVEL OF PREPARATION

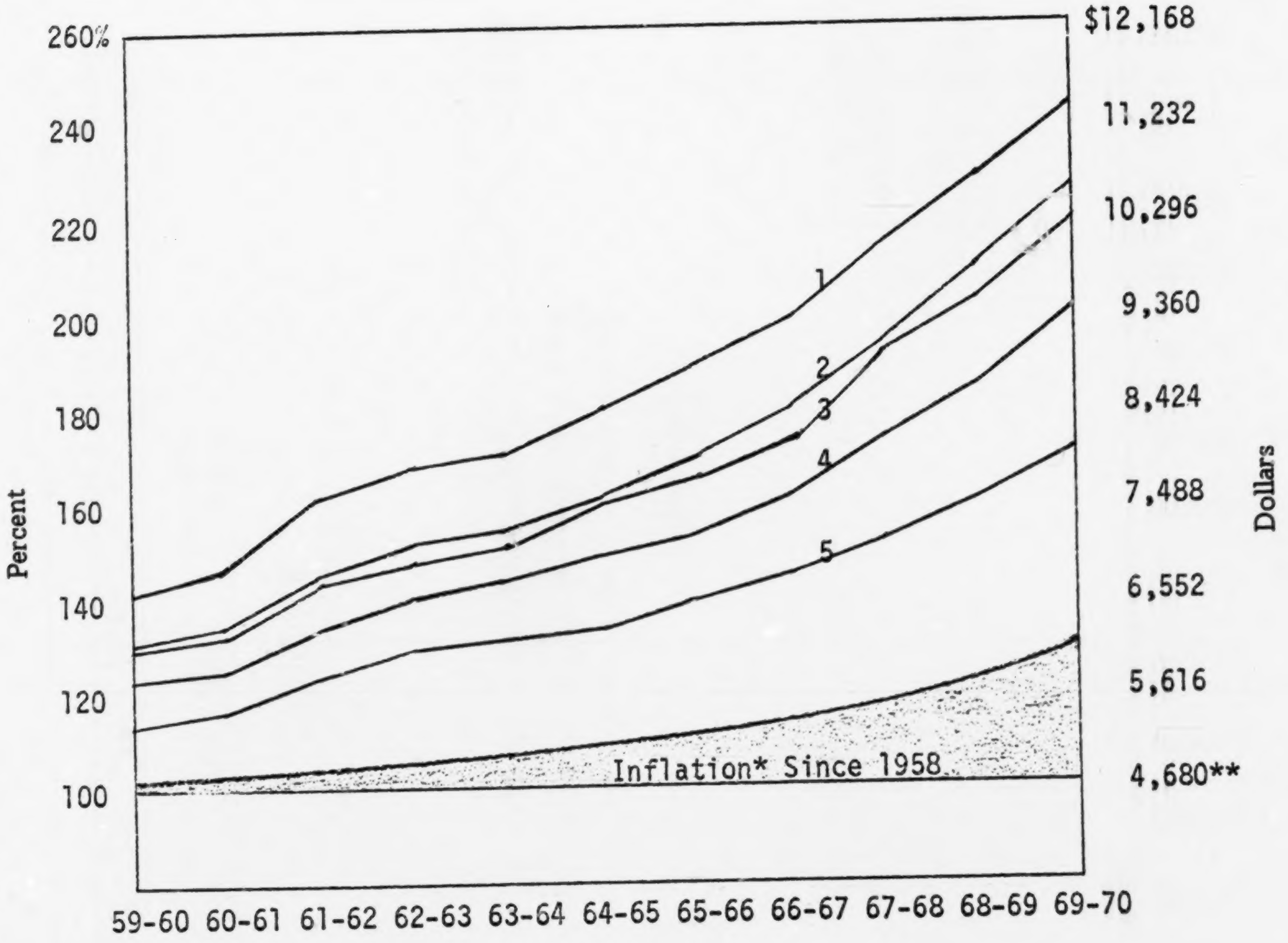


*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

Figure 16

AVERAGES OF MAXIMUMS OF SCHEDULED TEACHER SALARIES BY LEVEL OF PREPARATION



Legend:

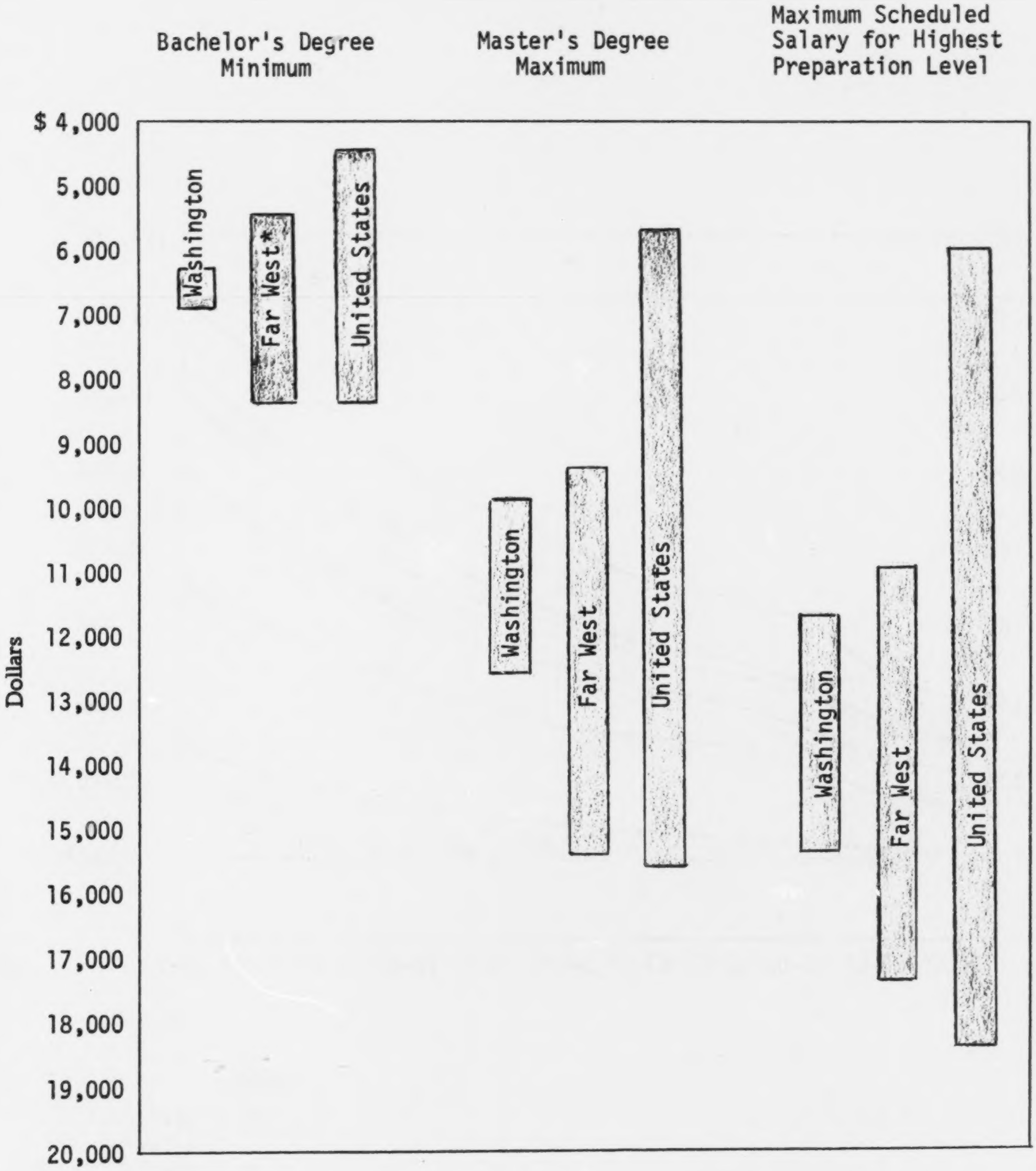
1 Highest
2 Six Years
3 Master's Degree
4 Five Years
5 Bachelor's Degree

*Personal Consumption Expenditures

**1957-1959 U.S. Average Teacher Salary

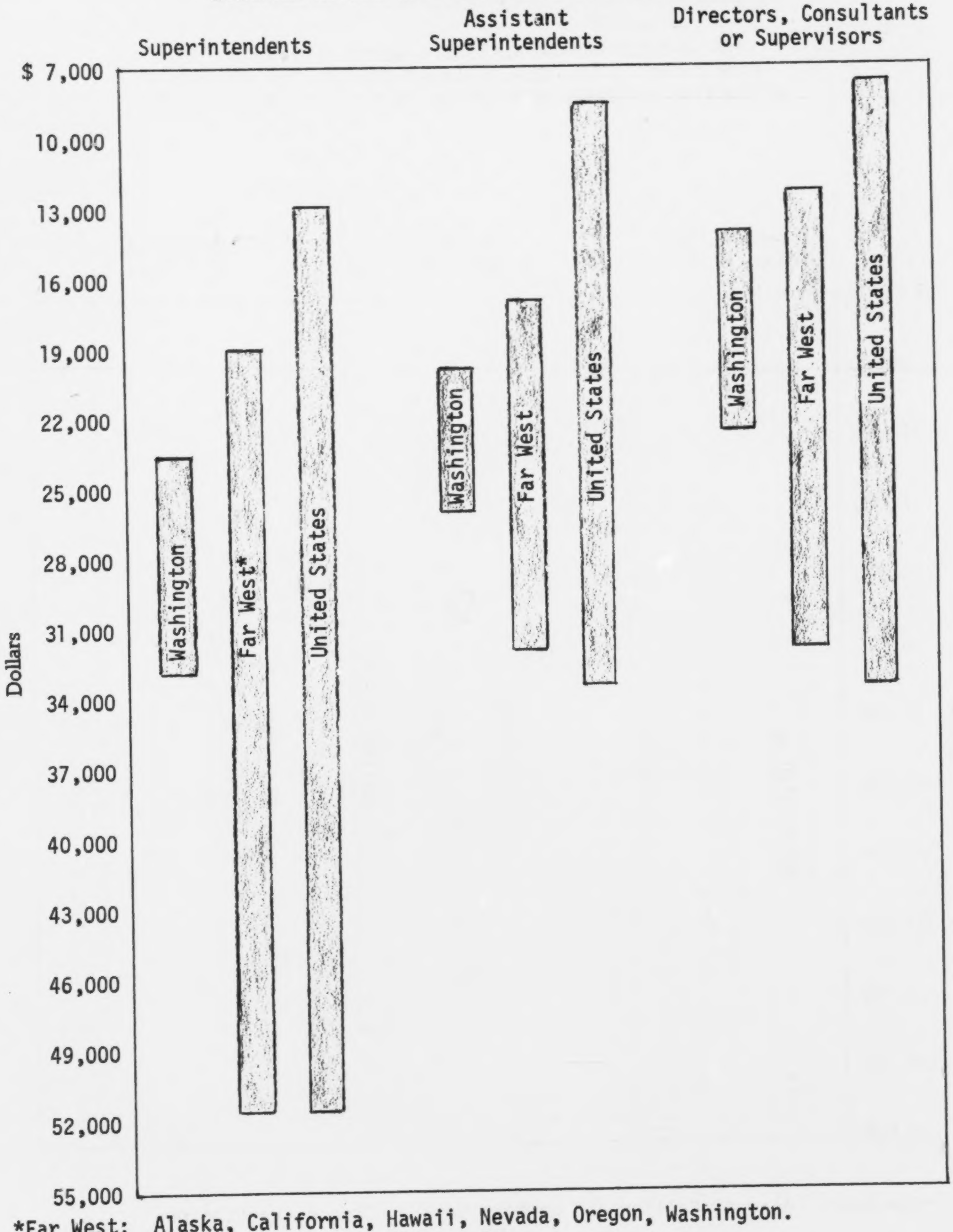
Figure 17

1969-1970 RANGE SCHEDULED SALARIES FOR CLASSROOM TEACHERS, BY GEOGRAPHIC REGION REPORTING SYSTEMS WITH ENROLLMENTS OF 6,000 OR MORE



*Far West: Alaska, California, Hawaii, Nevada, Oregon, Washington.

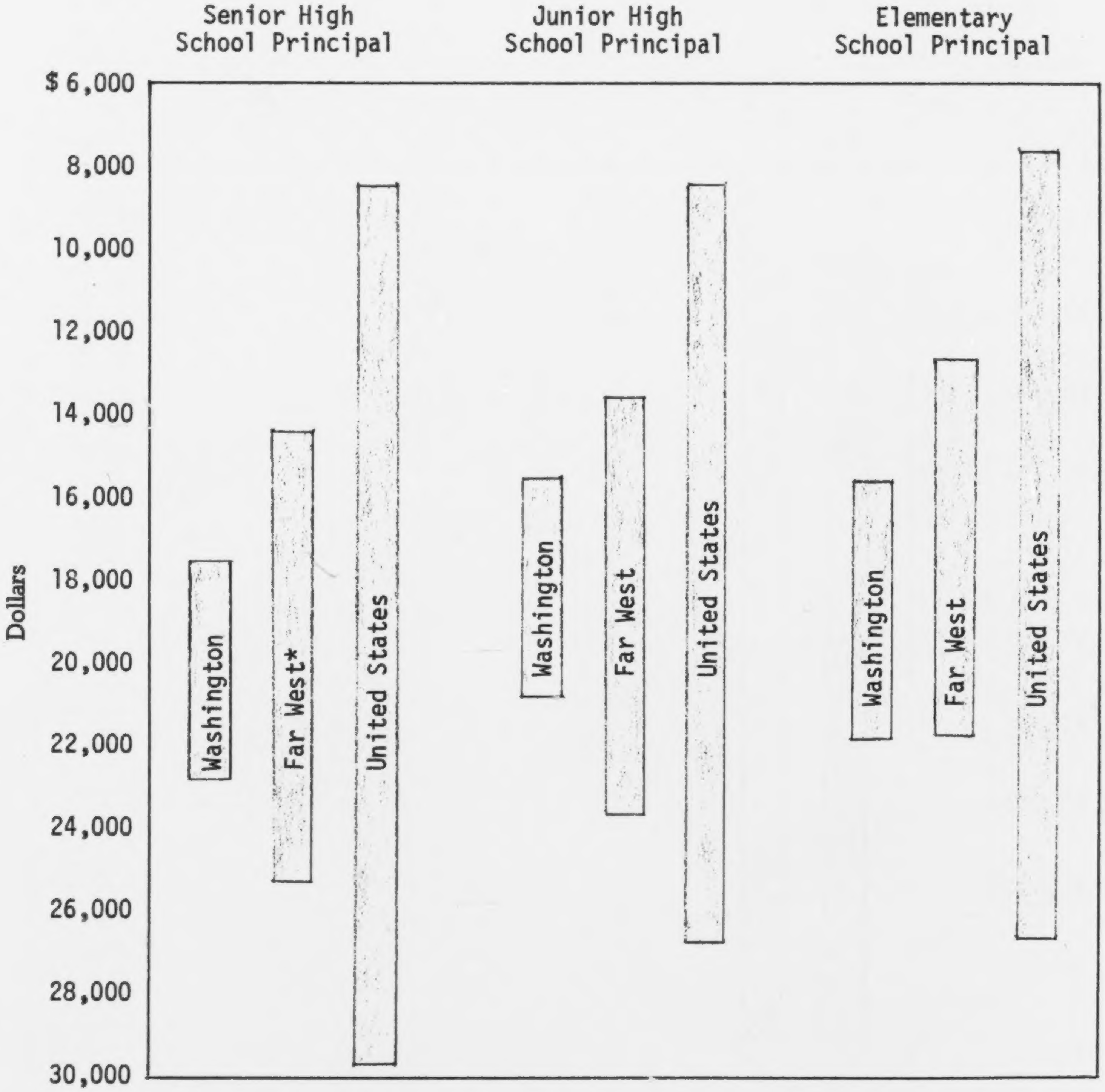
Figure 18
1969-1970 RANGE OF MAXIMUM SCHEDULED SALARIES FOR CENTRAL OFFICE ADMINISTRATORS BY GEOGRAPHIC REGION REPORTING SYSTEMS WITH ENROLLMENTS OF 6,000 OR MORE



*Far West: Alaska, California, Hawaii, Nevada, Oregon, Washington.

Figure 19

1969-1970 RANGES OF MAXIMUM SCHEDULED SALARIES FOR SUPERVISING PRINCIPALS BY GEOGRAPHIC REGION REPORTING SYSTEMS WITH ENROLLMENTS OF 6,000 OR MORE



*Far West: Alaska, California, Hawaii, Nevada, Oregon, Washington.

Figure 20

WASHINGTON STATE TO UNITED STATES RATIOS OF AVERAGE MAXIMUMS OF SCHEDULED TEACHER SALARIES BY LEVEL OF PREPARATION FOR SCHOOLS WITH ENROLLMENT OF 6,000 OR MORE

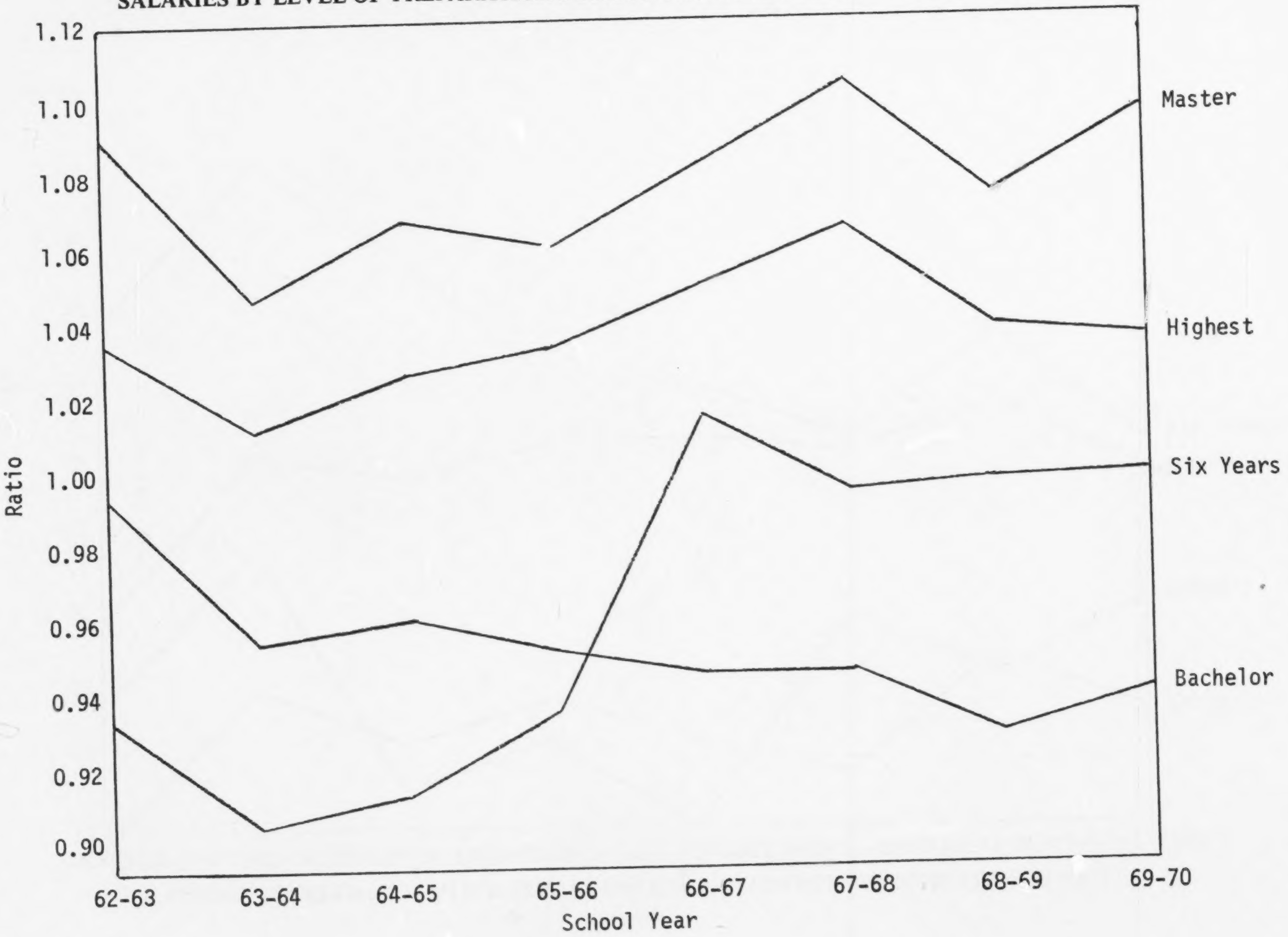


Figure 21

WASHINGTON STATE TO UNITED STATES RATIOS OF AVERAGE MINIMUMS OF SCHEDULED TEACHER SALARIES BY LEVEL OF PREPARATION FOR SCHOOLS WITH ENROLLMENT OF 6,000 OR MORE

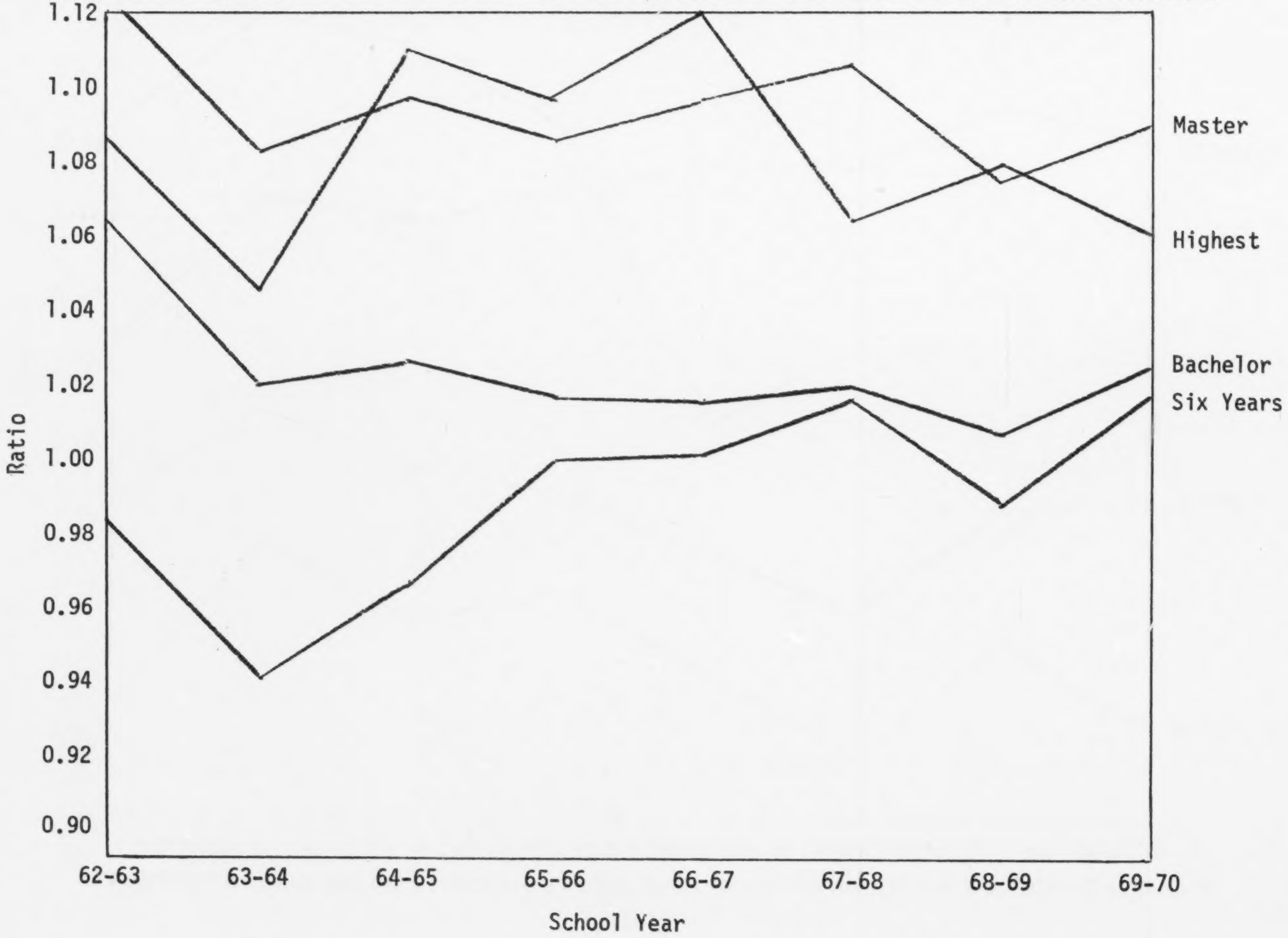
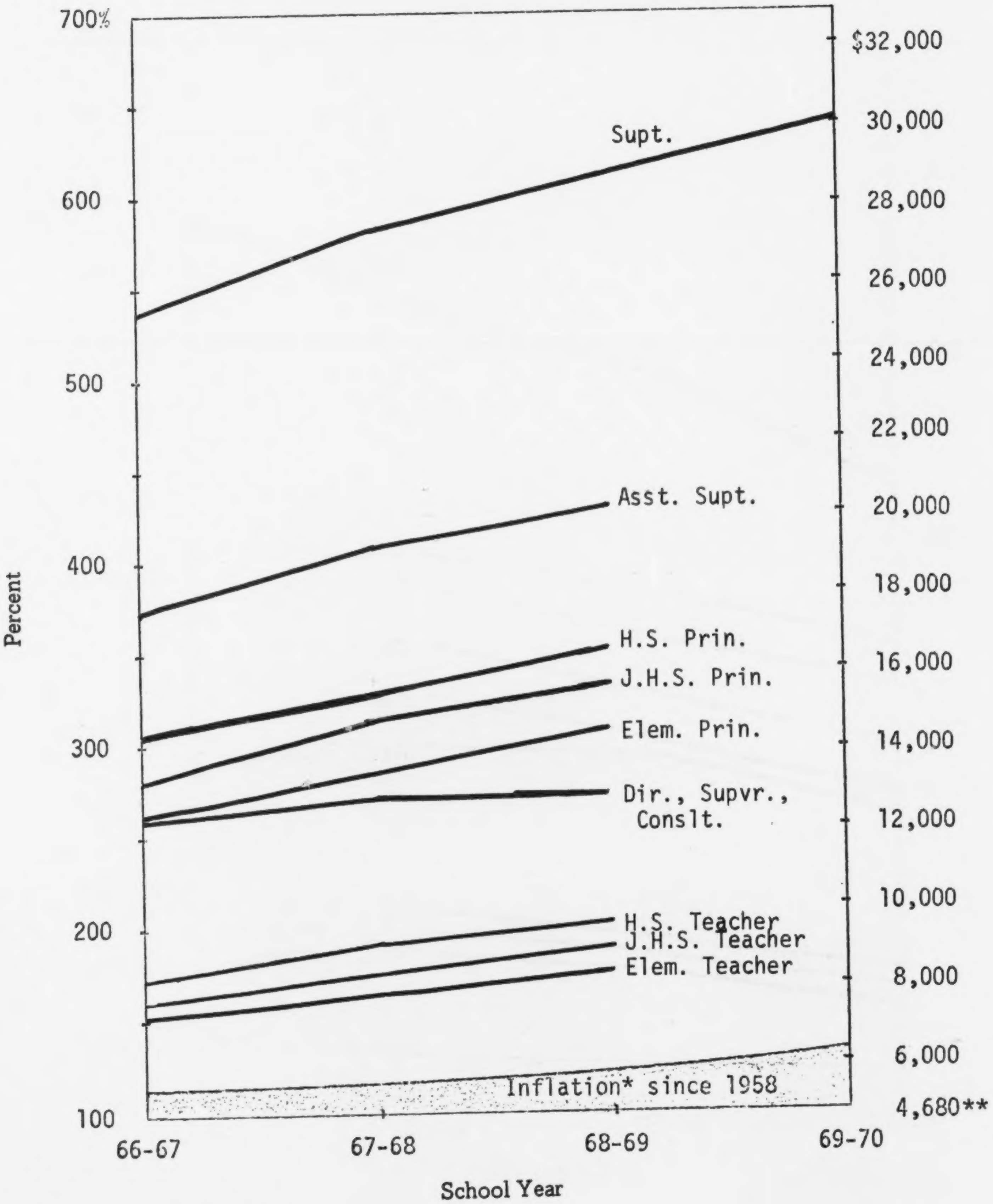


Figure 22

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 1

(Greater than 20,000 Enrollment)

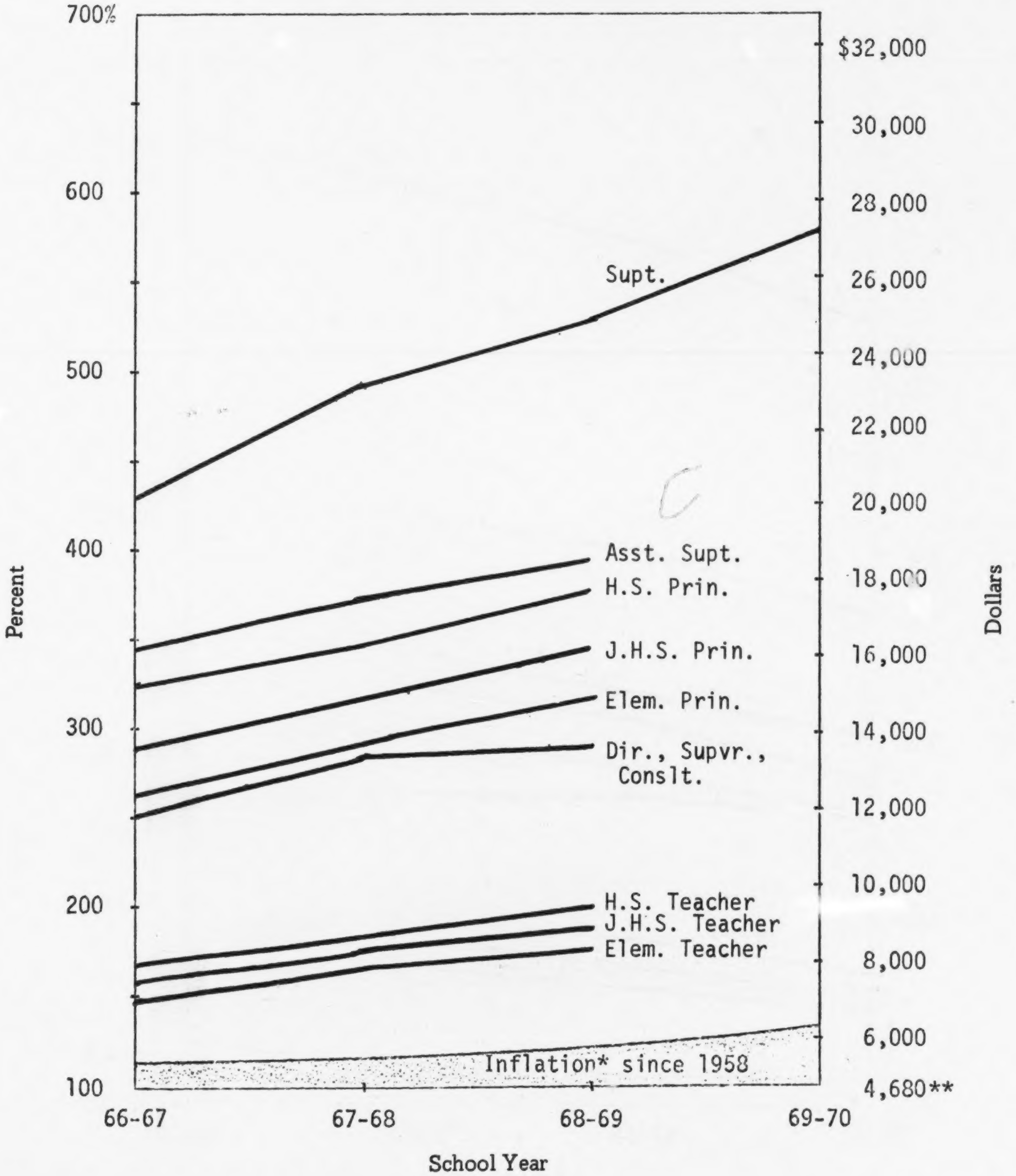


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 23

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 2
(10,000-19,999 Enrollment)

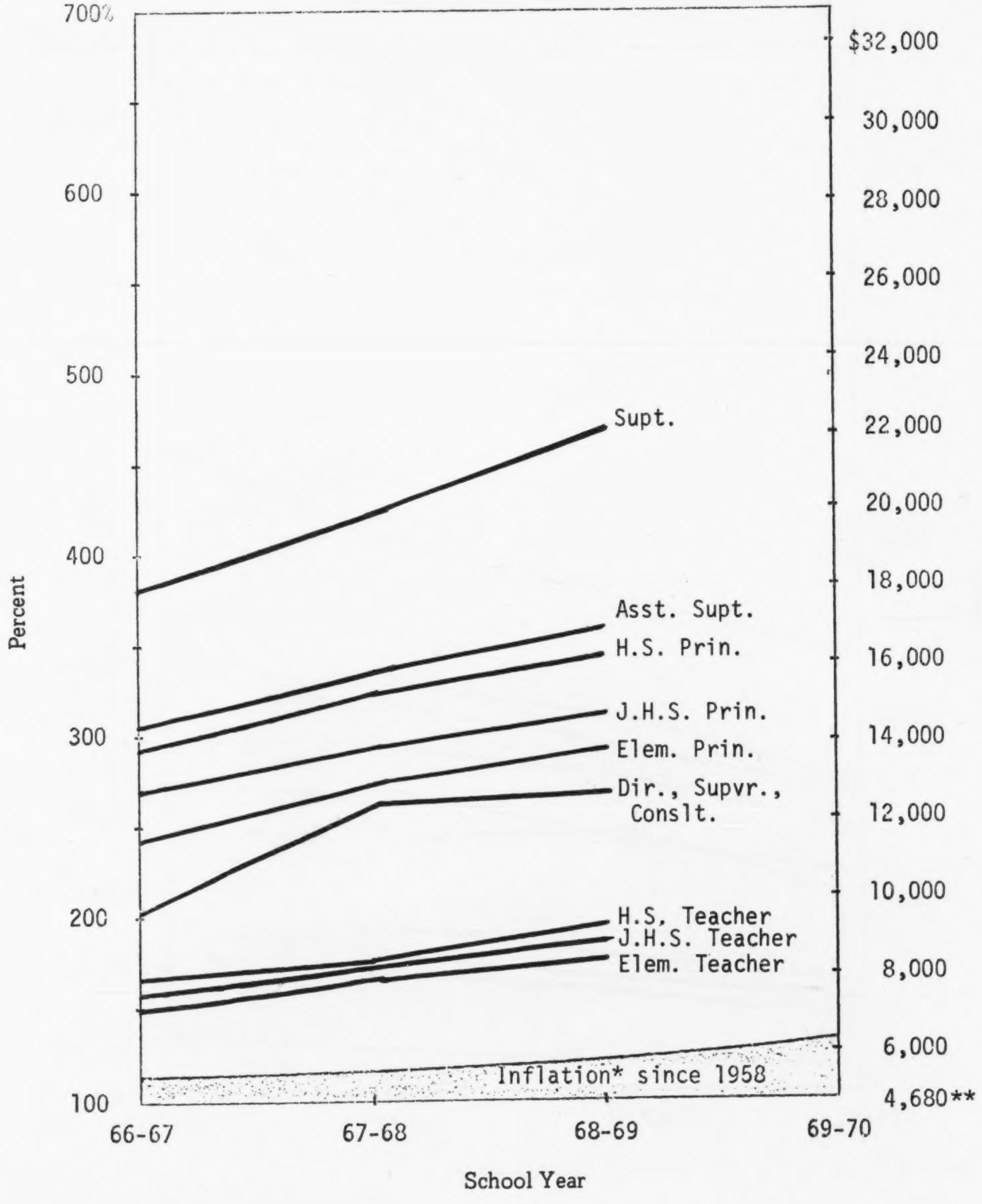


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 24

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 3
(5,000-9,999 Enrollment)



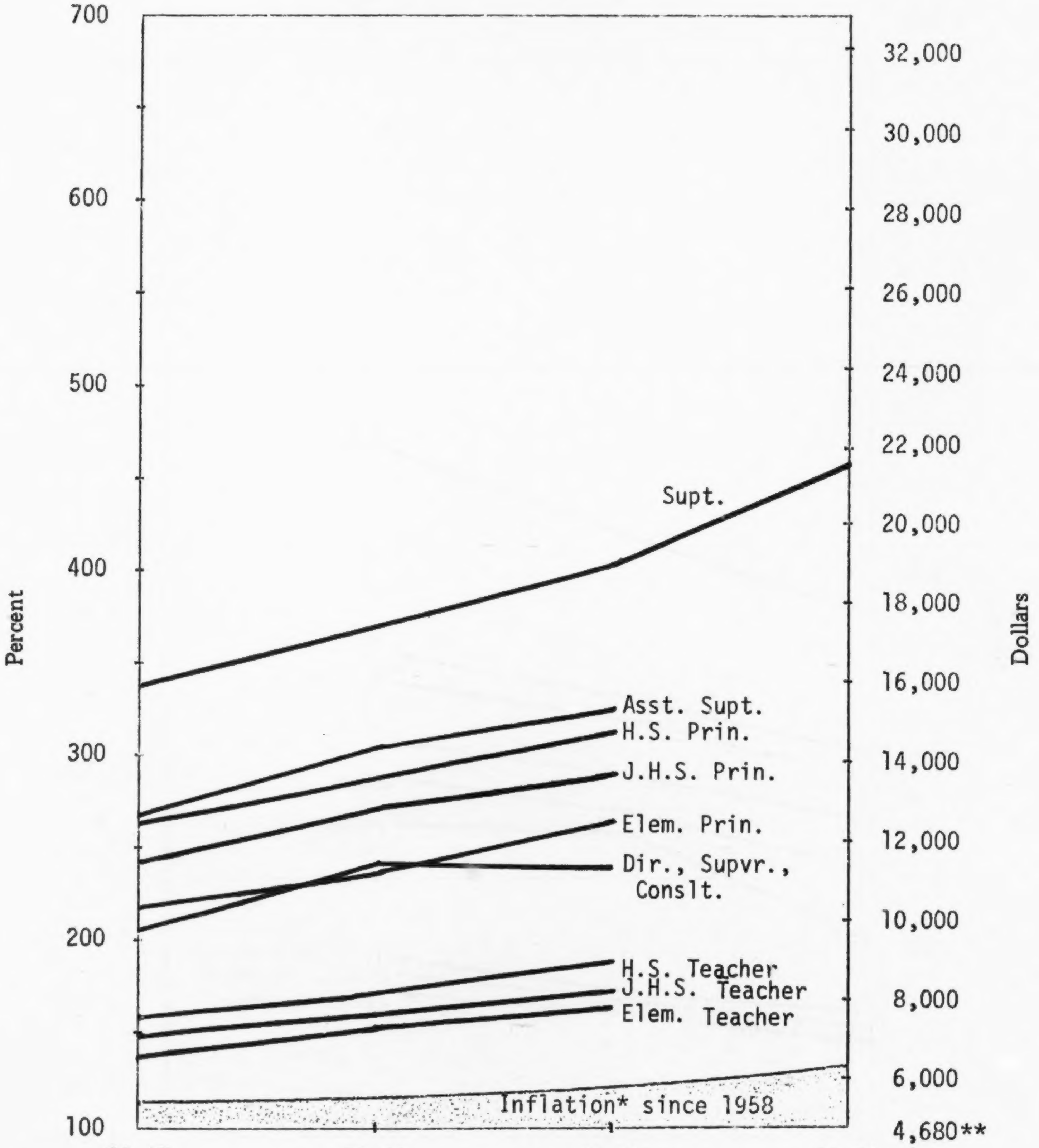
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 25

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 4

(2,600-4,999 Enrollment)



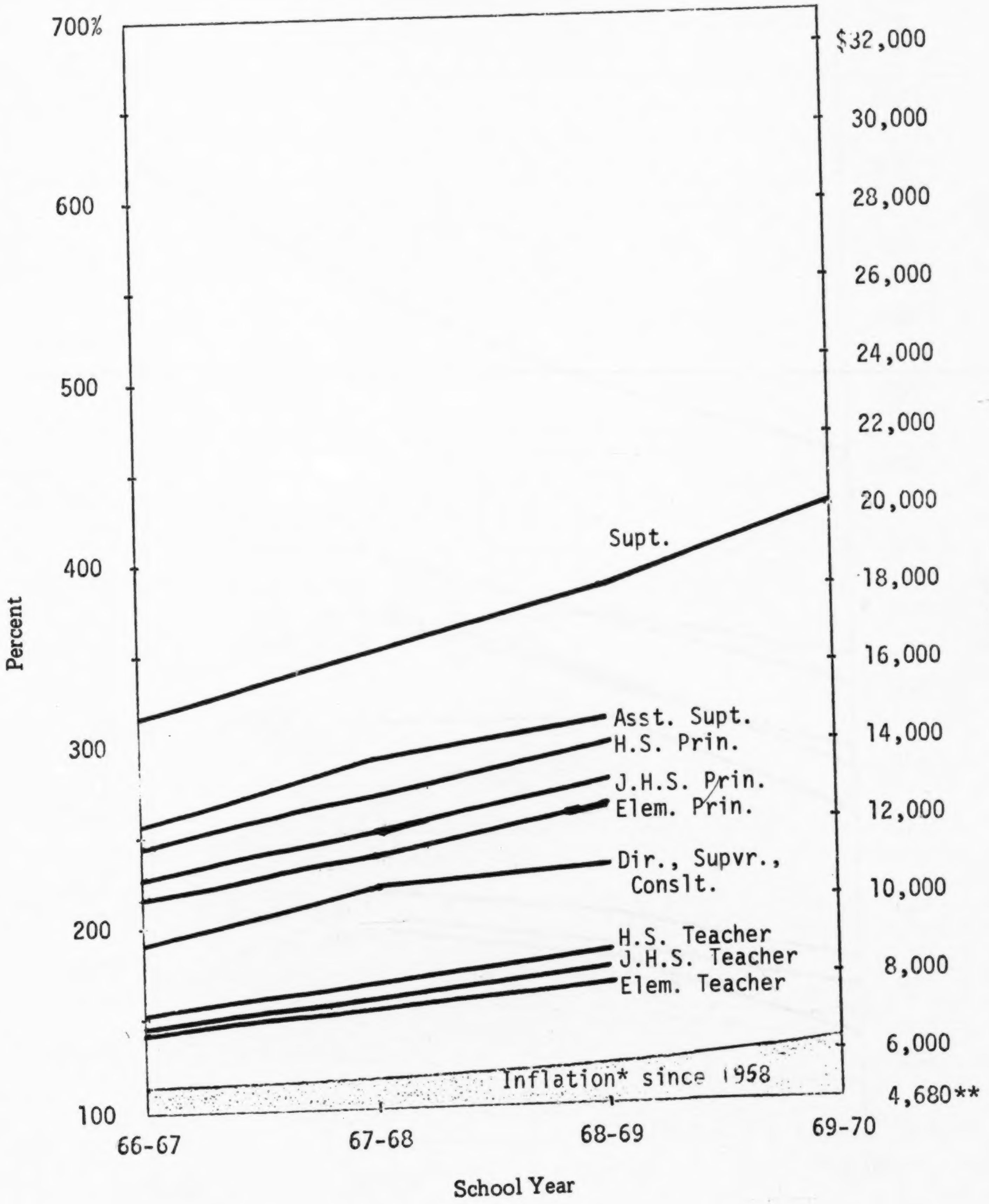
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 26

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 5

(1,600-2,599 Enrollment)



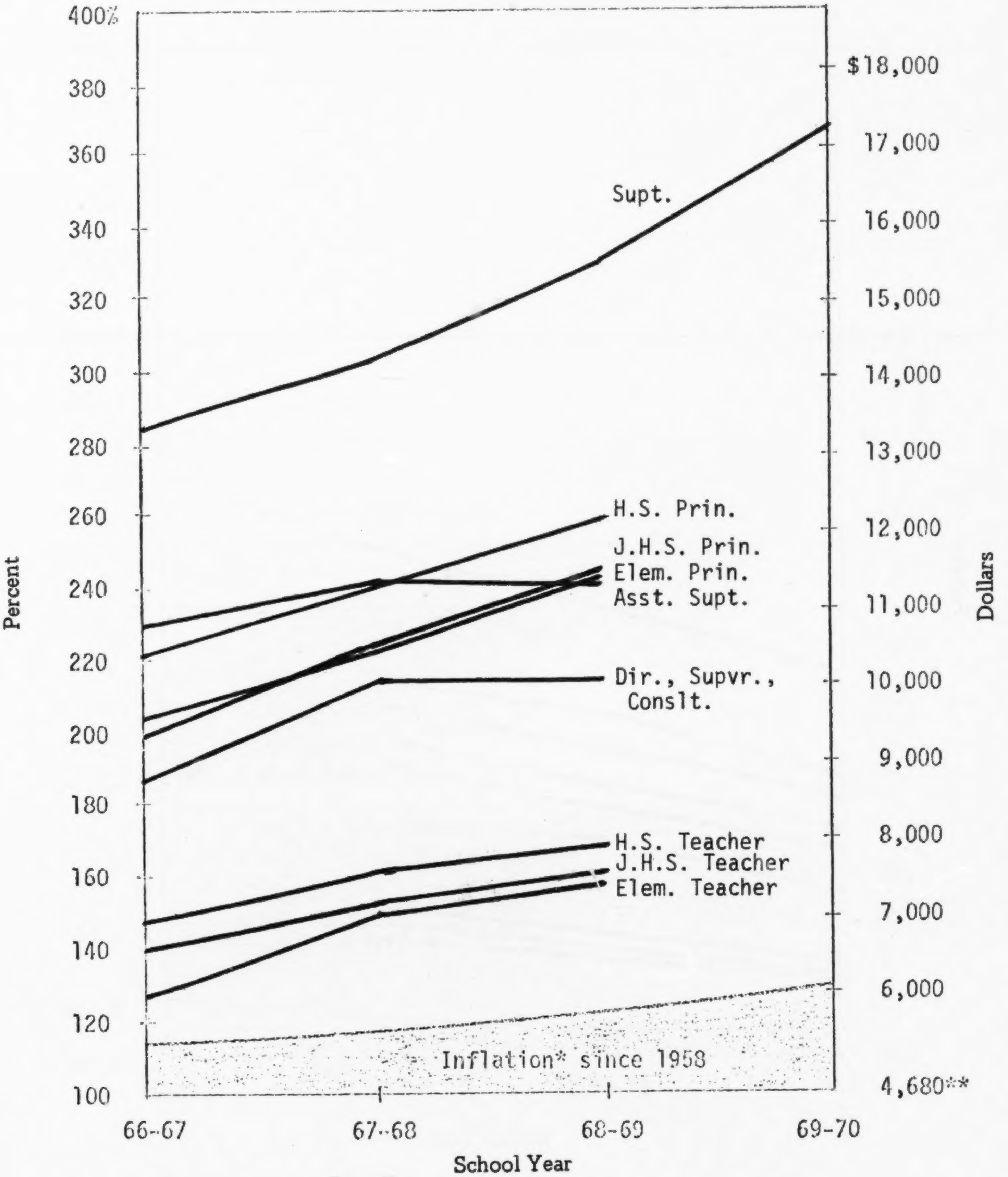
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 27

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 6

(1,000-1,599 Enrollment)



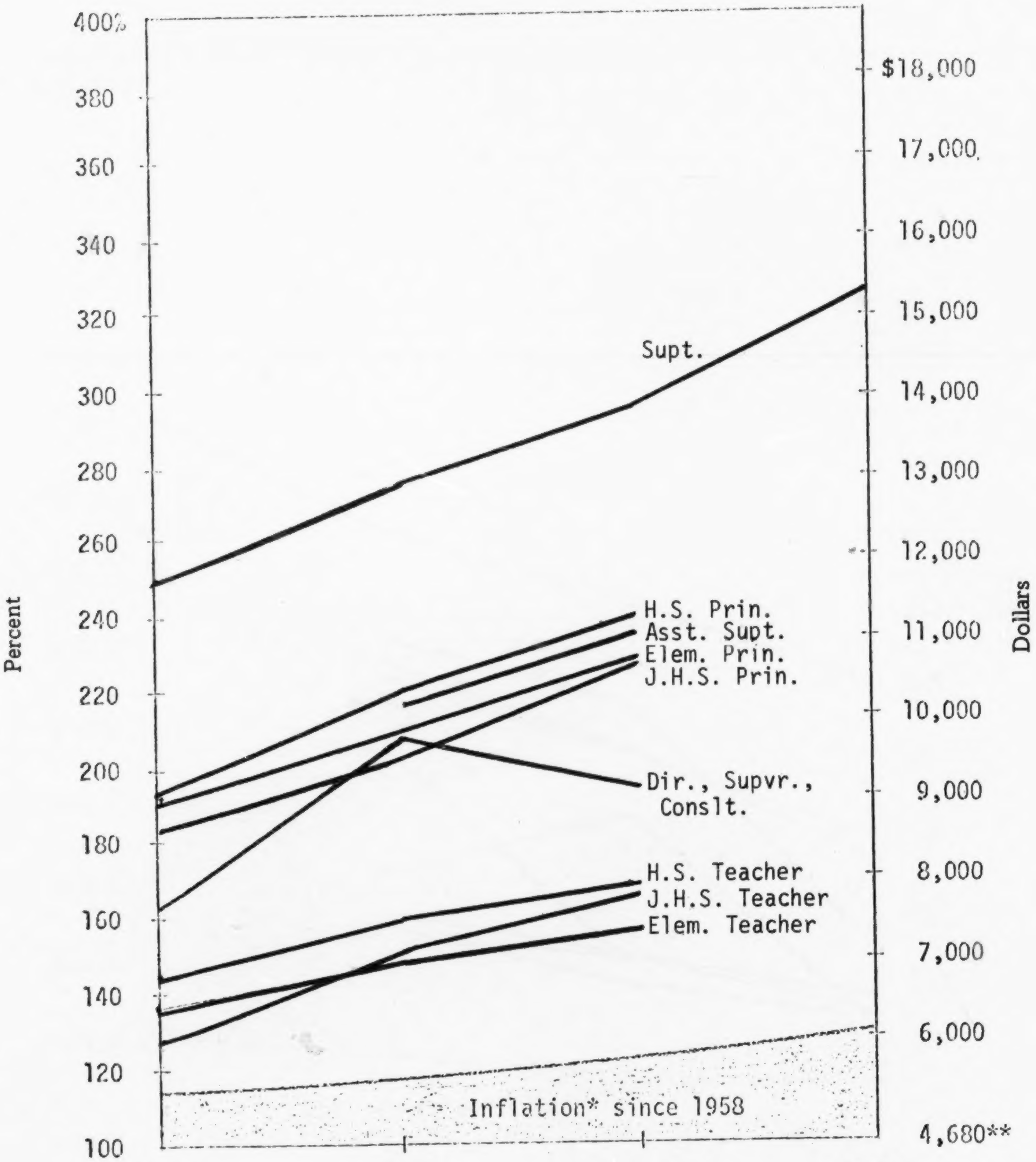
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 28

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 7

(500-999 Enrollment)



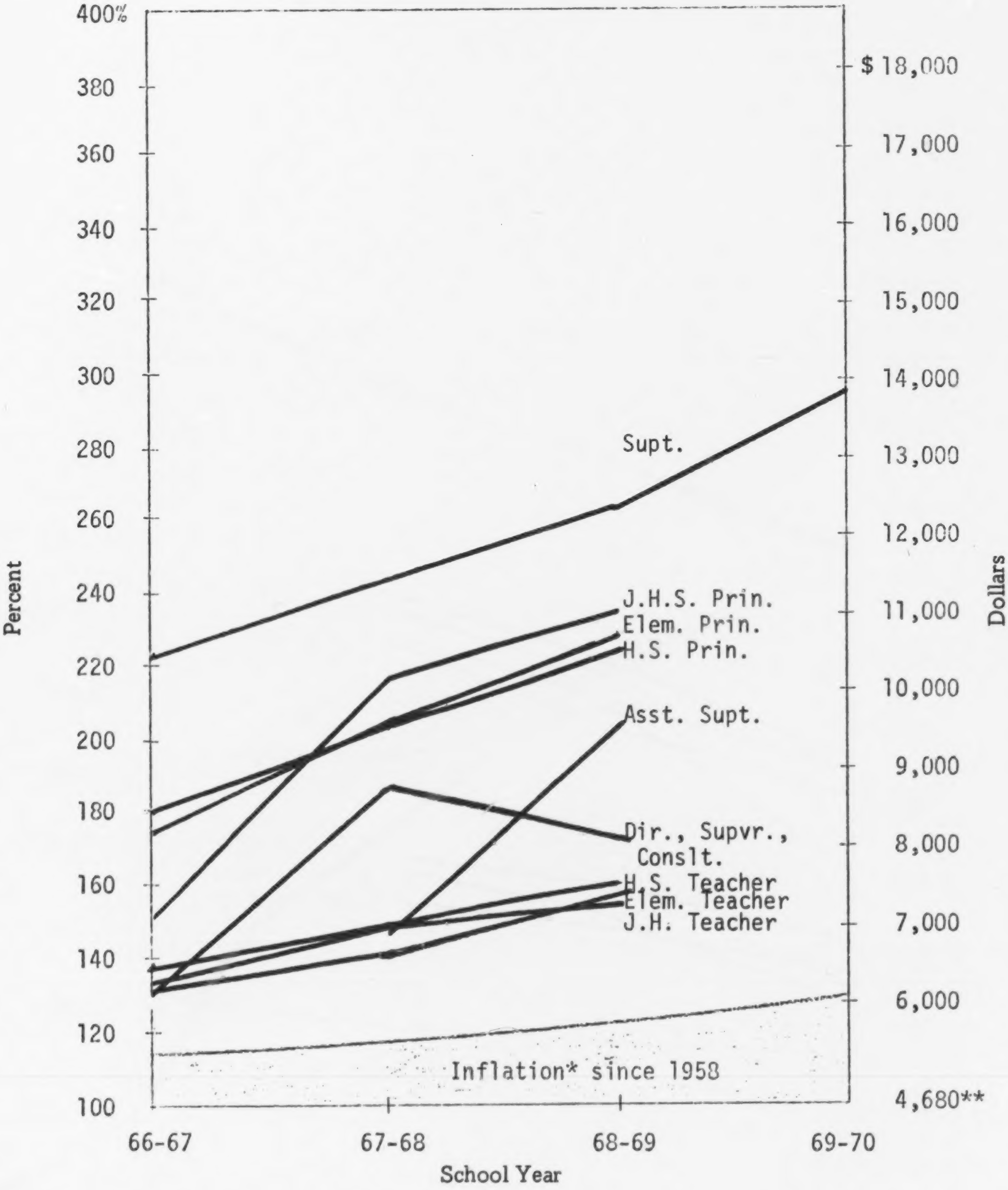
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 29

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 8

(200-499 Enrollment)



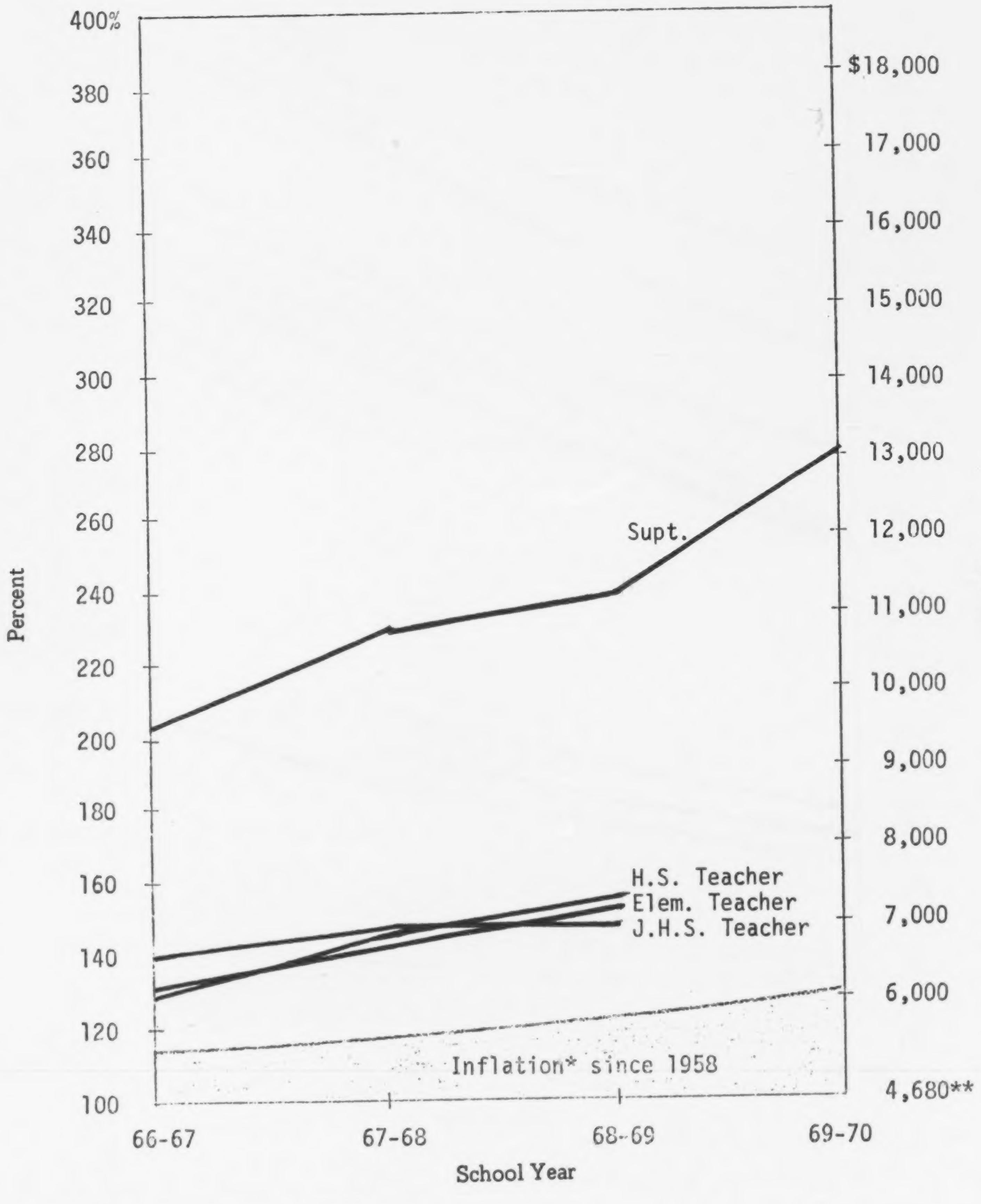
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 30

AVERAGES OF CERTIFICATED PERSONNEL SALARIES FOR SCHOOL DISTRICT SIZE GROUP 9

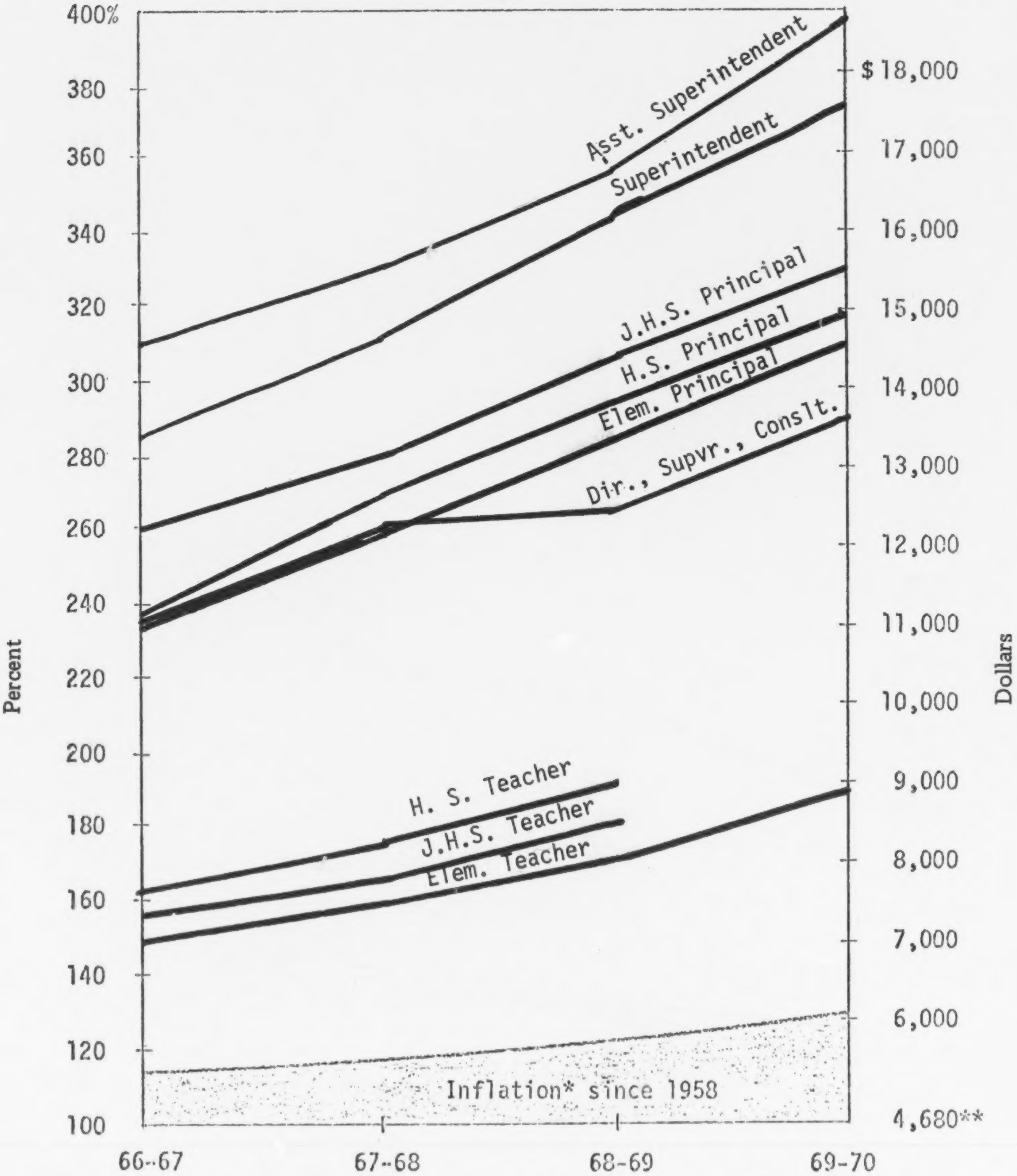
(Less than 200 Enrollment)



*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 31
AVERAGES OF CERTIFICATED PERSONNEL SALARIES BY POSITION



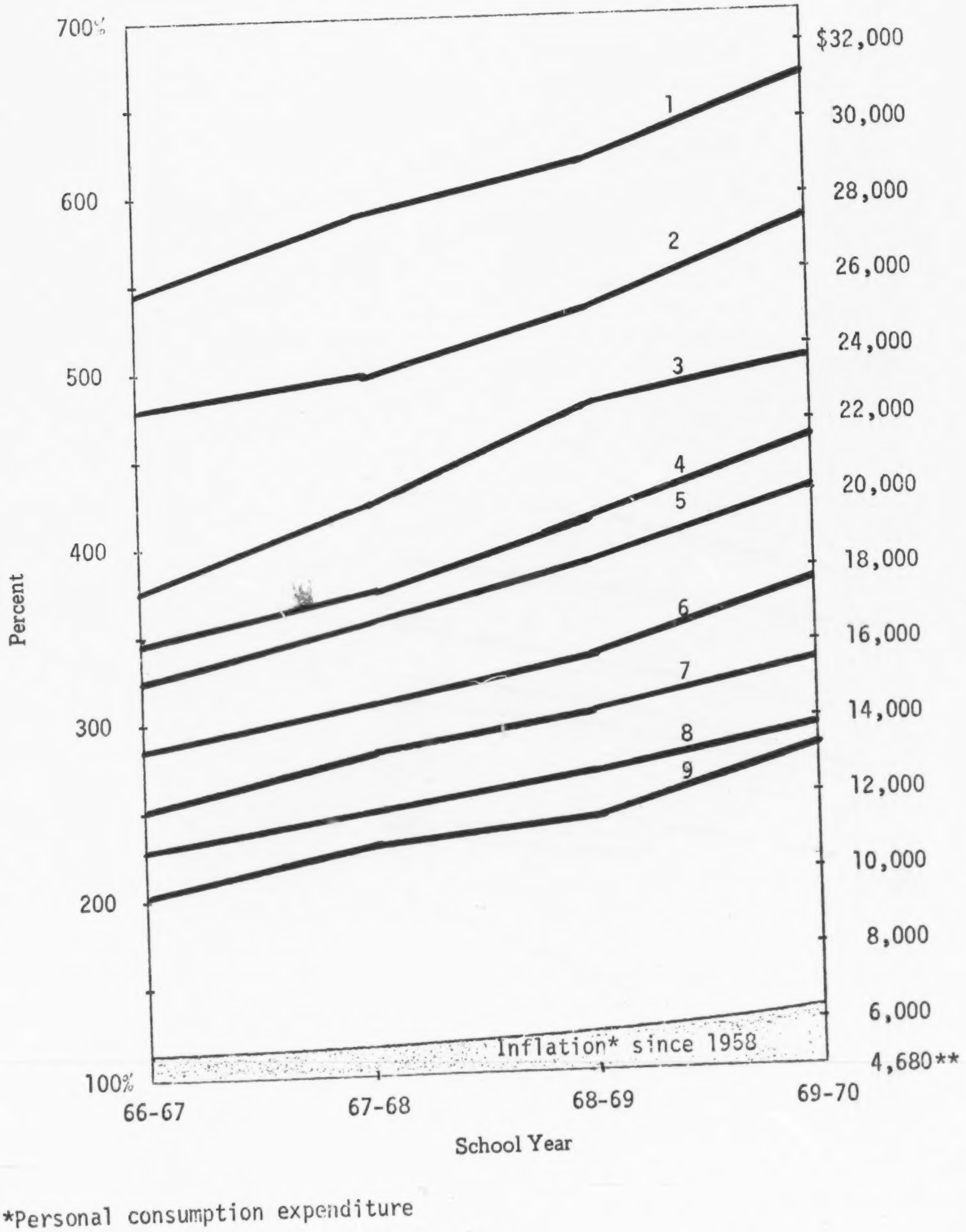
*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Note - Larger school districts have most of the assistant superintendents and junior high school principals which skews their over-all average salaries to the high side.

Figure 32

AVERAGES OF SUPERINTENDENT SALARIES BY SCHOOL DISTRICT SIZE GROUP

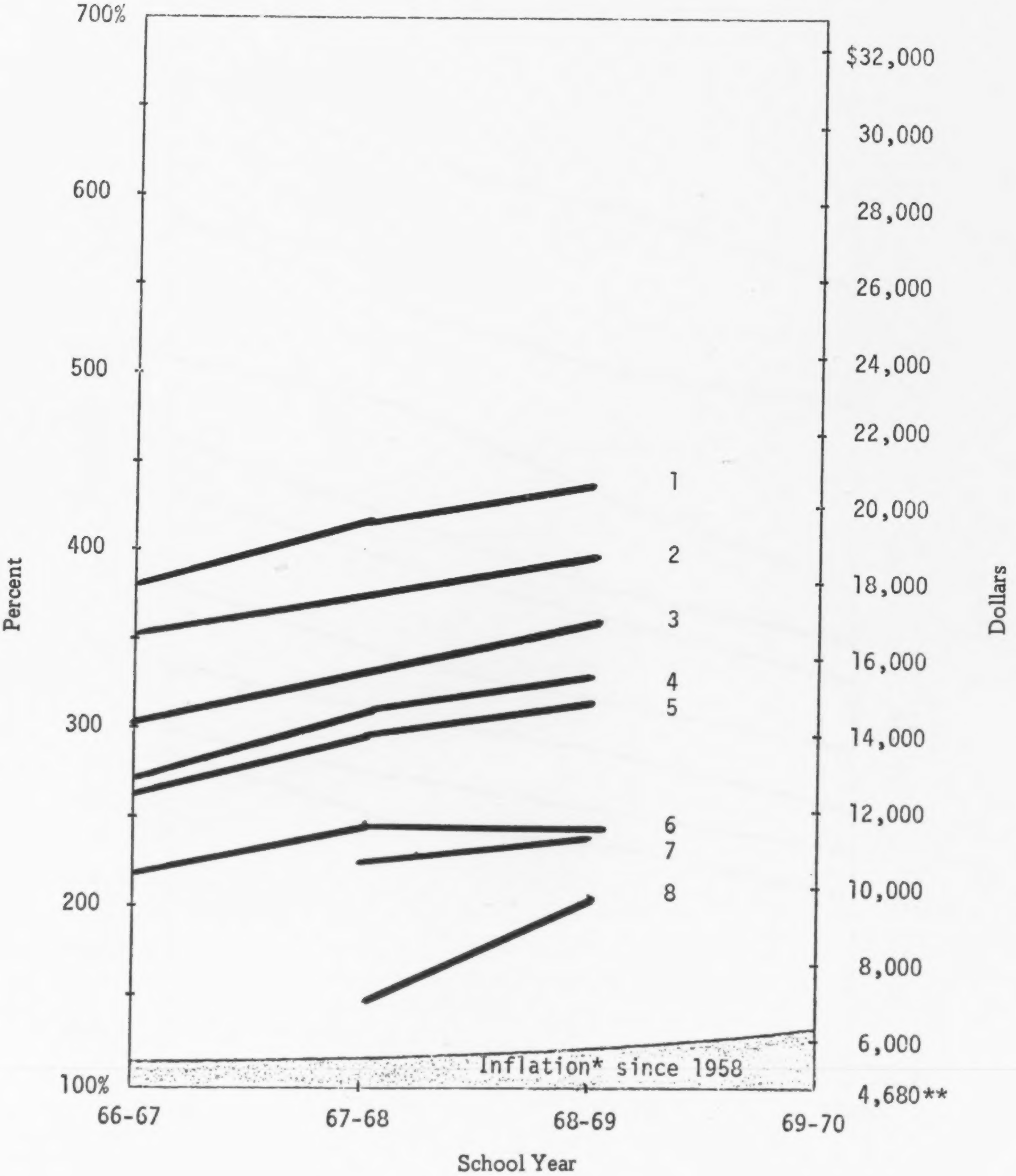


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 33

AVERAGES OF ASSISTANT SUPERINTENDENT SALARIES BY SCHOOL DISTRICT SIZE GROUP

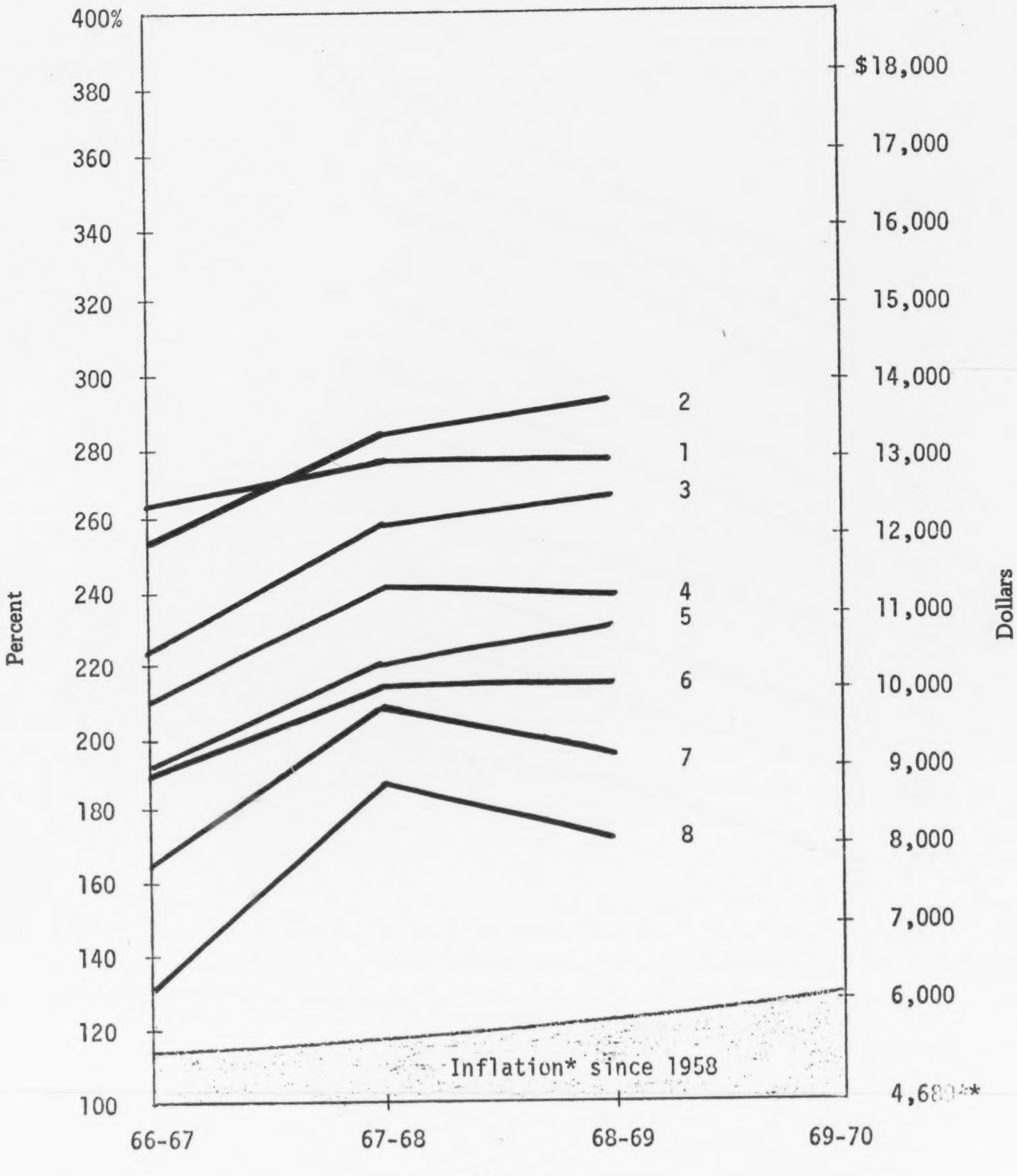


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 34

AVERAGES OF DIRECTOR, SUPERVISOR AND CONSULTANT SALARIES BY SCHOOL DISTRICT SIZE GROUP

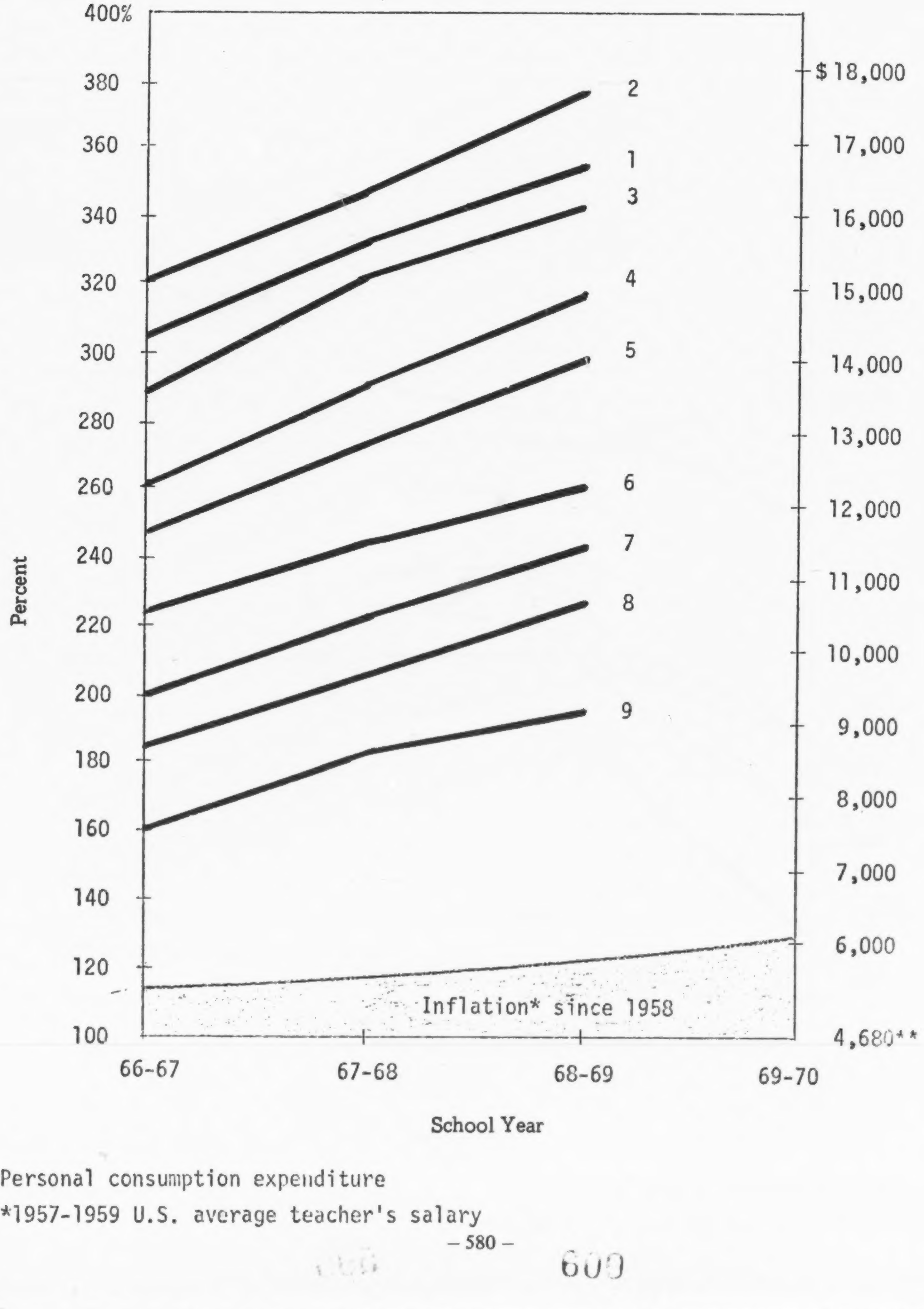


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 35

AVERAGES OF SENIOR HIGH SCHOOL PRINCIPAL SALARIES BY SCHOOL DISTRICT SIZE GROUP

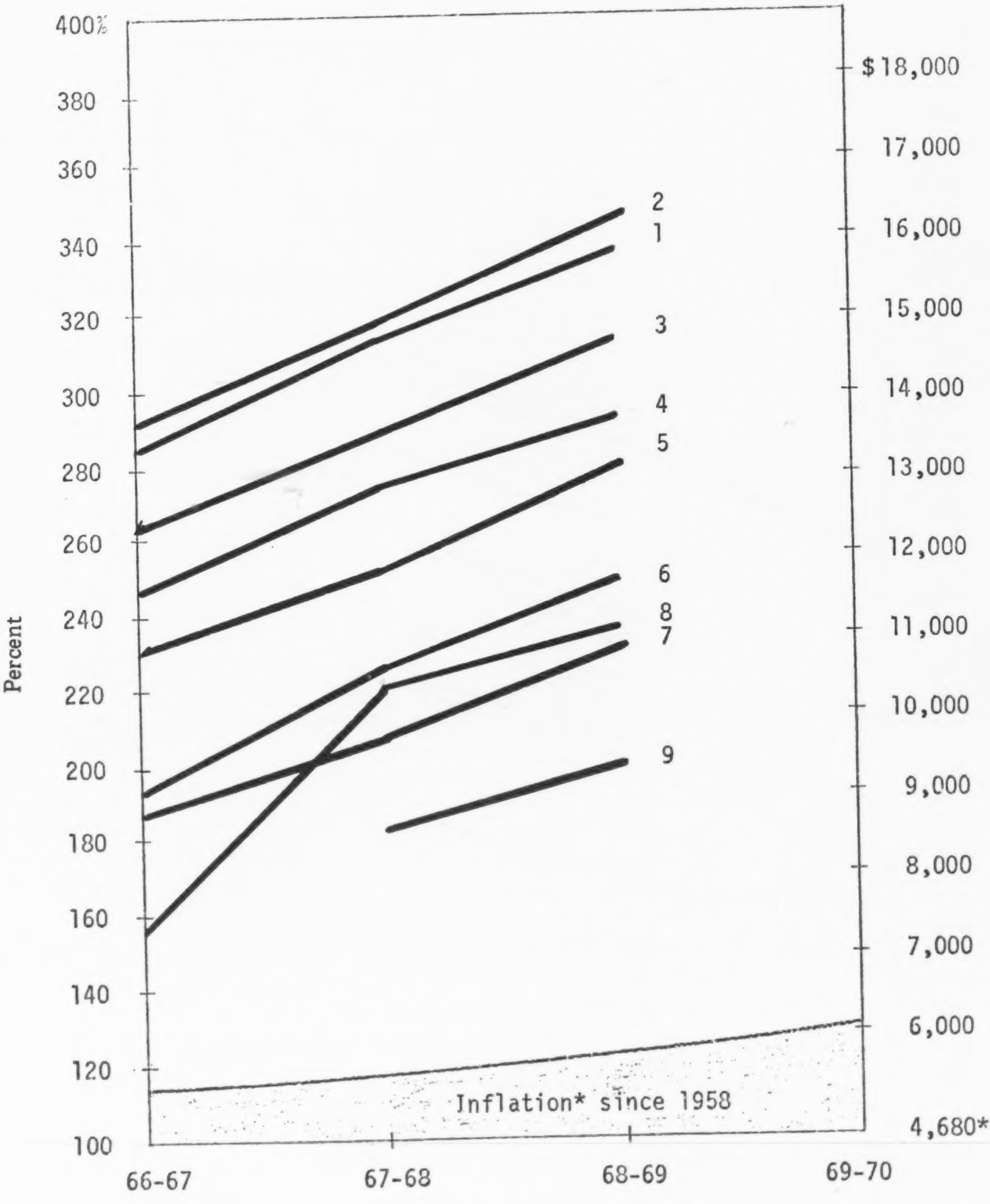


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 36

AVERAGES OF JUNIOR HIGH SCHOOL PRINCIPAL SALARIES BY SCHOOL DISTRICT SIZE GROUP

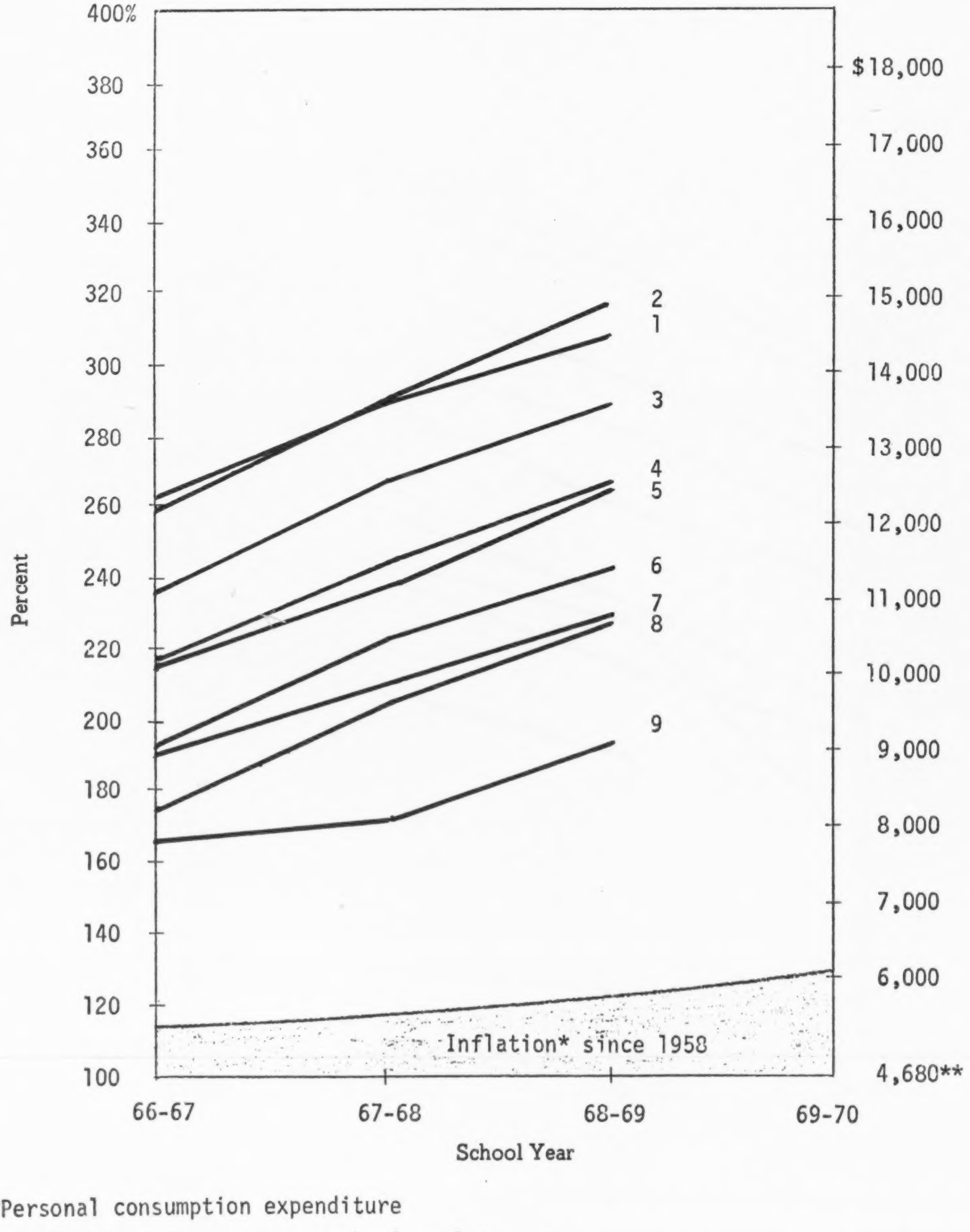


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 37

AVERAGES OF ELEMENTARY SCHOOL PRINCIPAL SALARIES BY SCHOOL DISTRICT SIZE GROUP

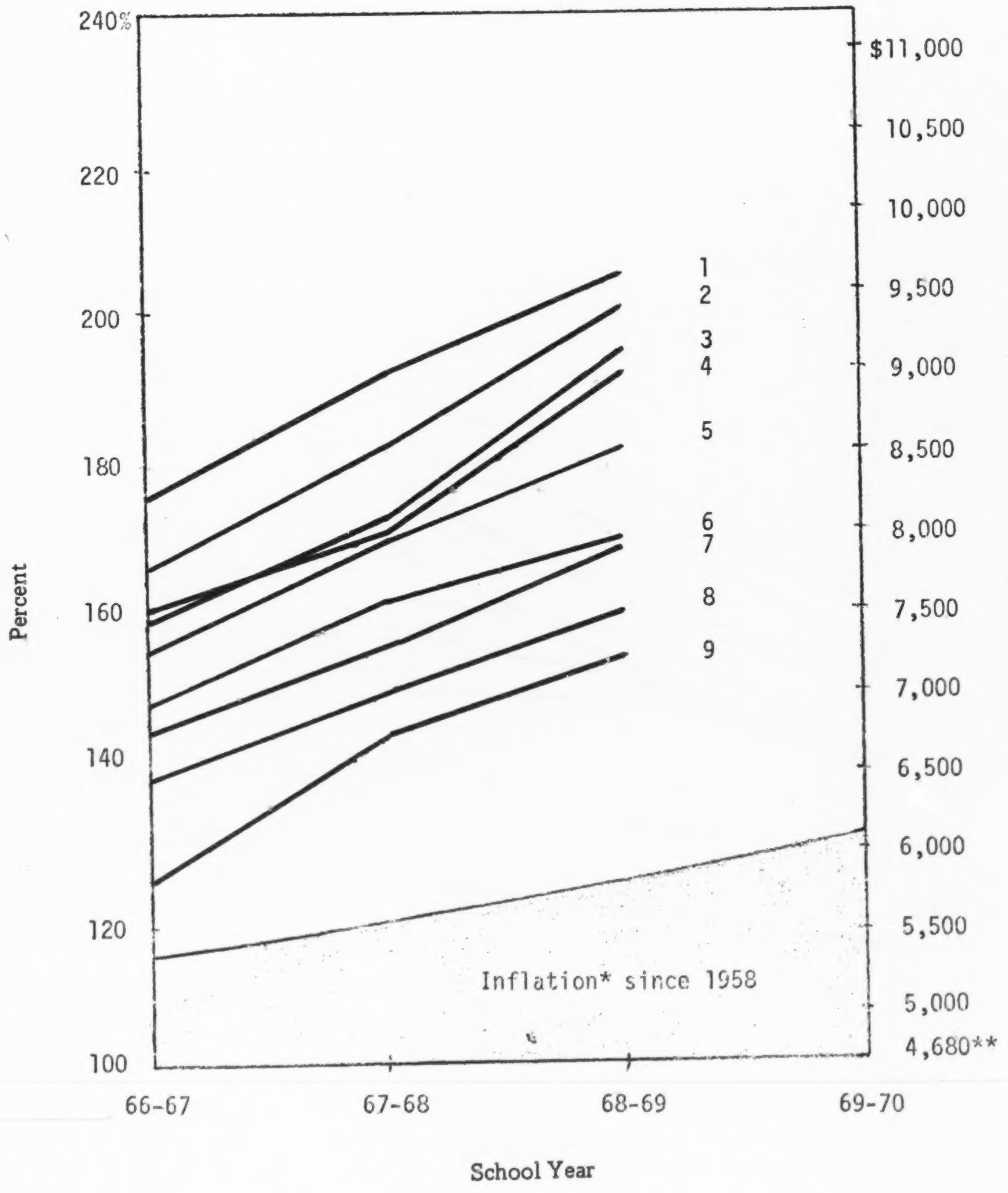


*Personal consumption expenditure

**1957-1959 U.S. average teacher's salary

Figure 38

AVERAGES OF SENIOR HIGH SCHOOL TEACHER SALARIES BY SCHOOL DISTRICT SIZE GROUP

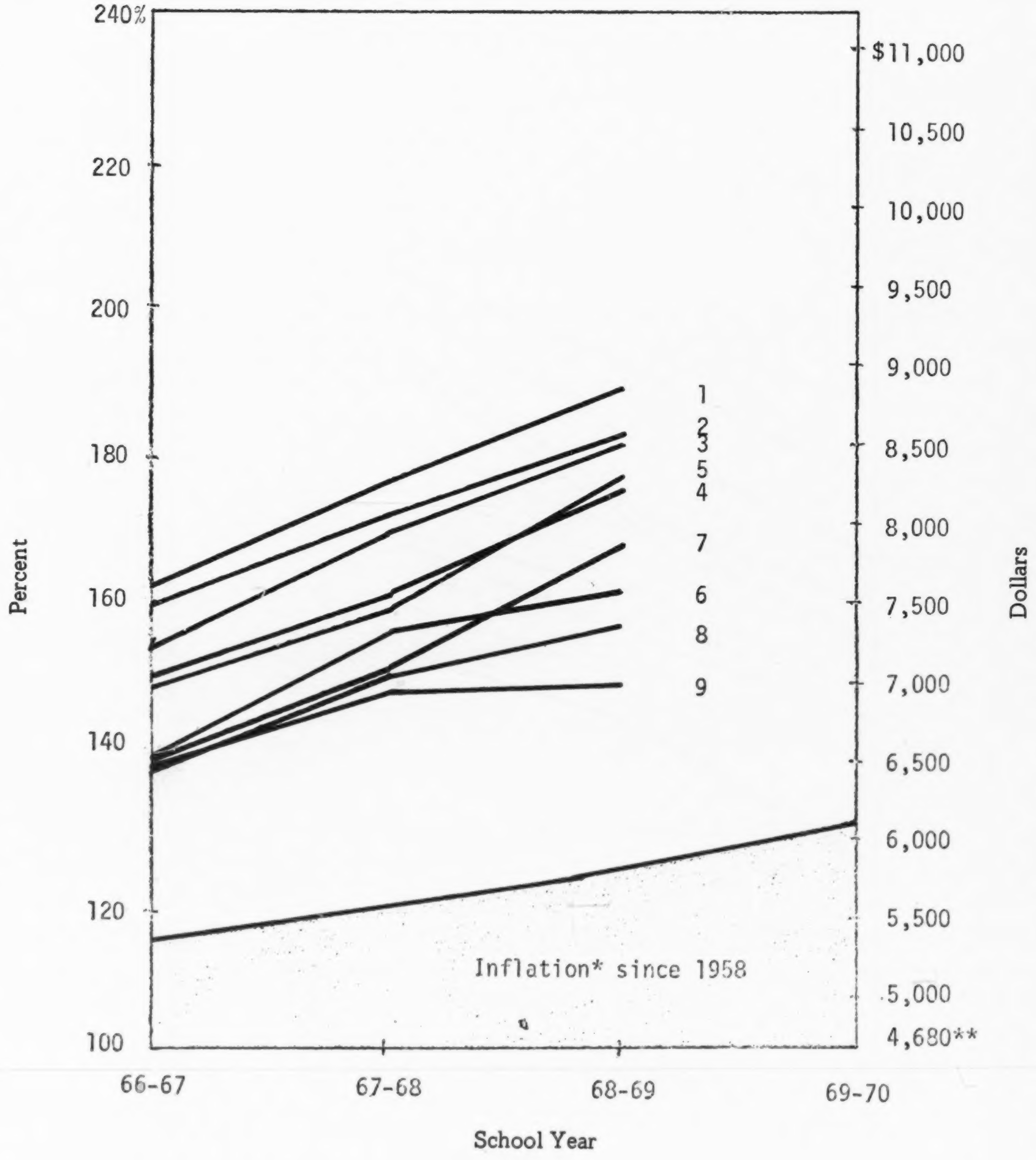


* Personal consumption expenditure

** 1957-1959 U.S. average teacher's salary

Figure 39

AVERAGES OF JUNIOR HIGH SCHOOL TEACHER SALARIES BY SCHOOL DISTRICT SIZE GROUP

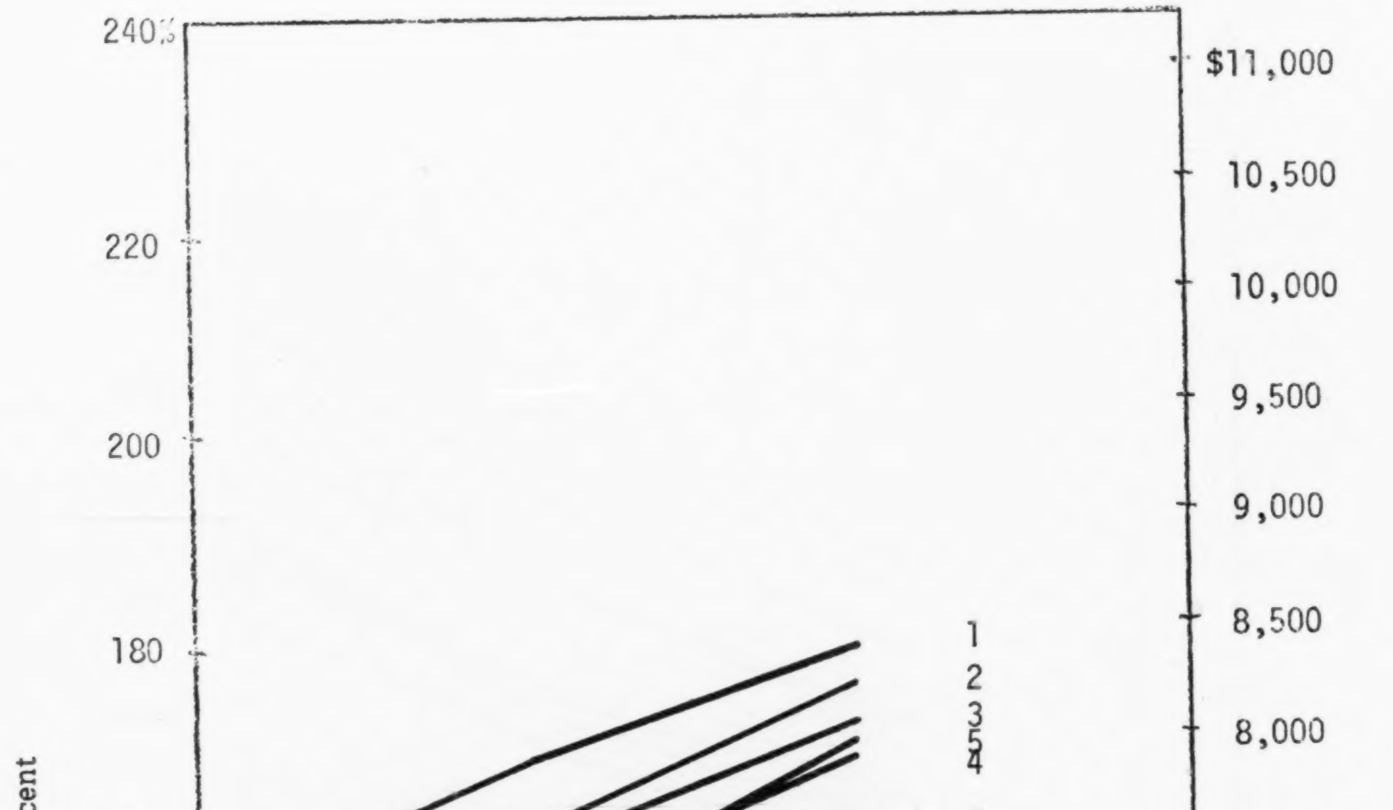


* Personal consumption expenditure

** 1957-1959 U.S. average teacher's salary

Figure 40

AVERAGES OF ELEMENTARY SCHOOL TEACHER SALARIES BY SCHOOL DISTRICT SIZE GROUP

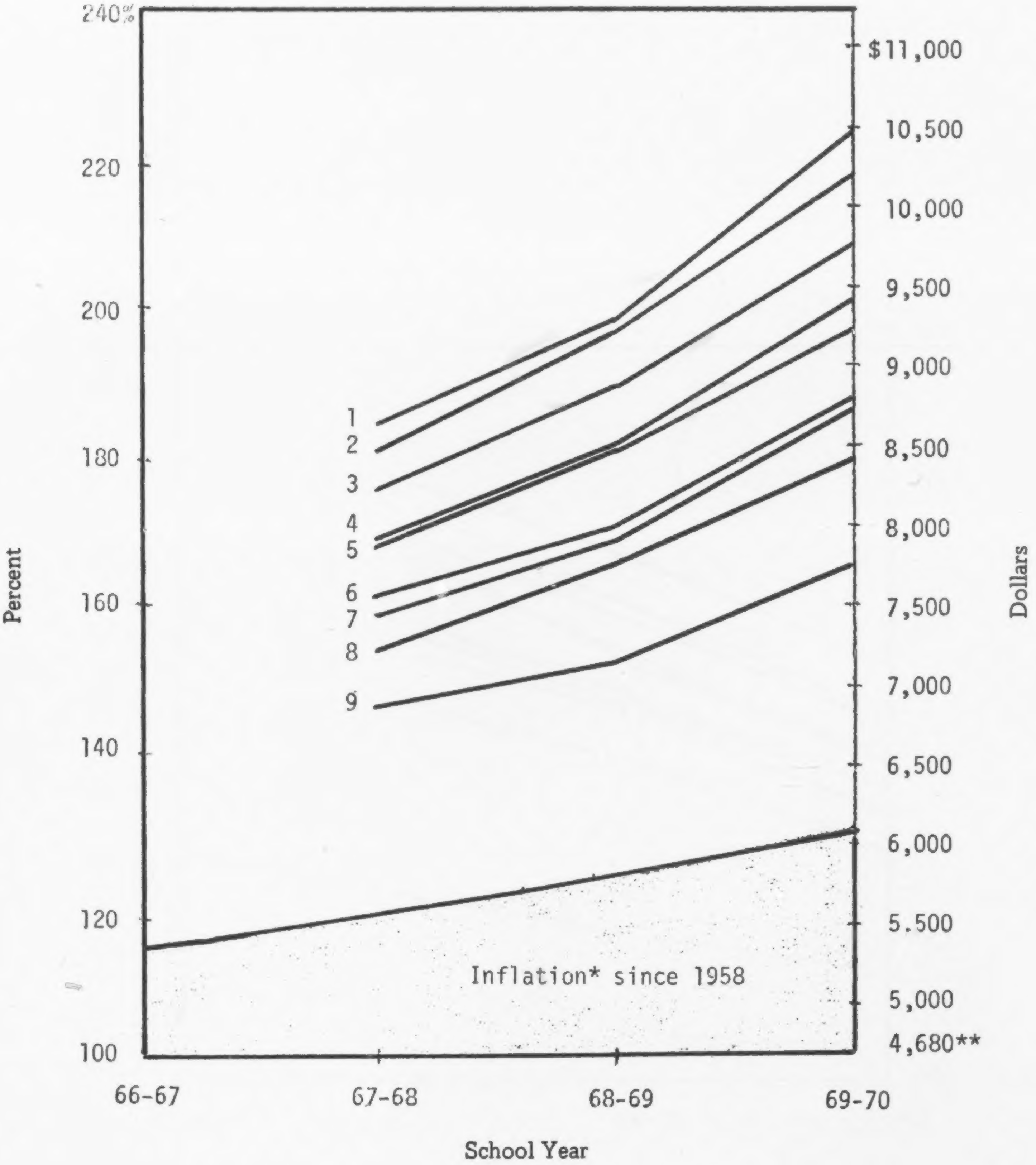


* Personal consumption expenditure

** 1957-1959 U.S. average teacher's salary

Figure 41

AVERAGES OF ALL CERTIFICATED PERSONNEL SALARIES BY SCHOOL DISTRICT SIZE GROUP

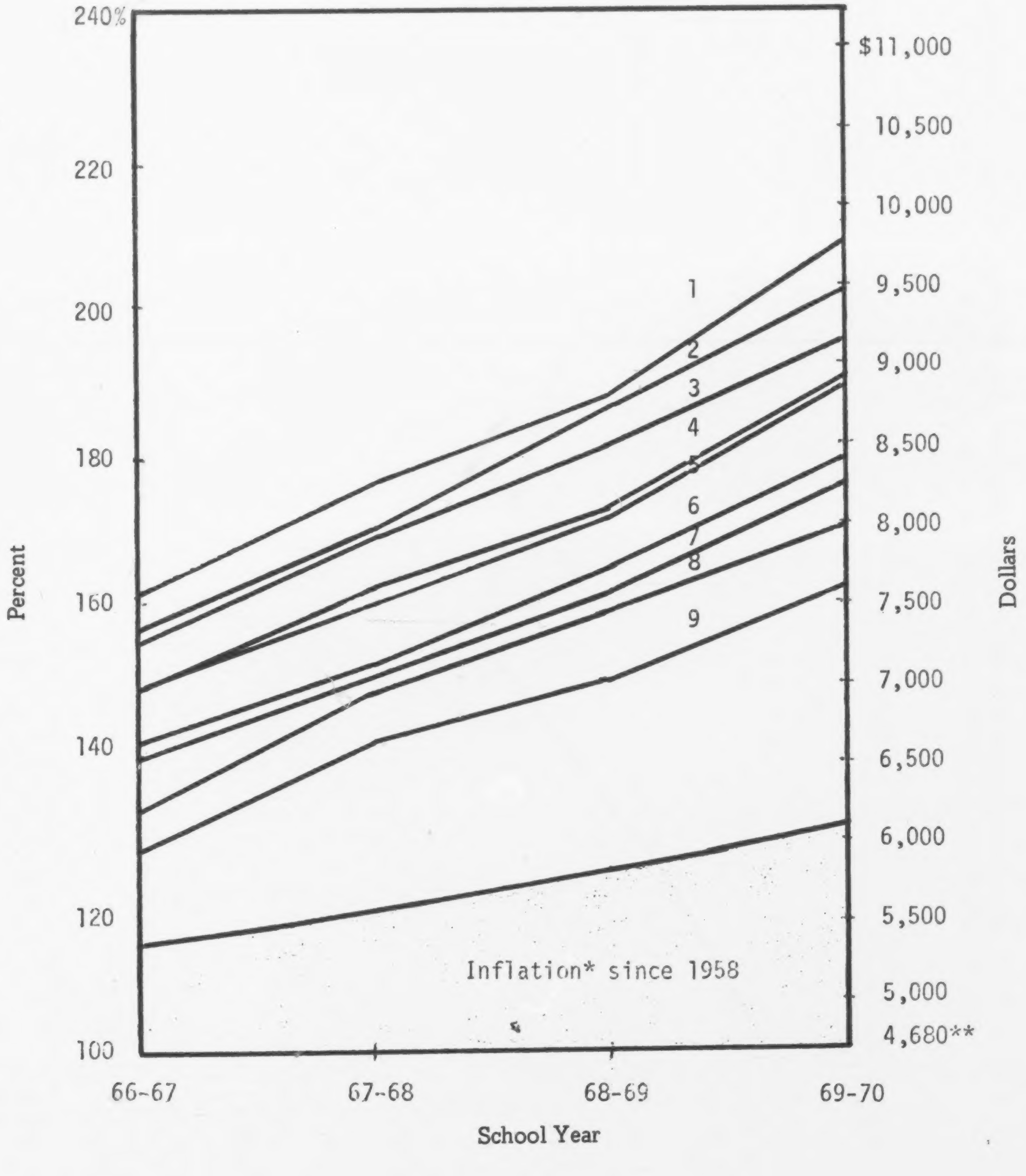


* Personal consumption expenditure

** 1957-1959 U.S. average teacher's salary

Figure 42

AVERAGES OF ALL CLASSROOM TEACHER SALARIES
BY SCHOOL DISTRICT SIZE GROUP



* Personal consumption expenditure

** 1957-1959 U.S. average teacher's salary

Figure 43

RATIO OF THE AVERAGE SALARY OF CERTIFICATED PERSONNEL FOR WASHINGTON STATE TO THE AVERAGE SALARY OF CERTIFICATED PERSONNEL FOR THE UNITED STATES

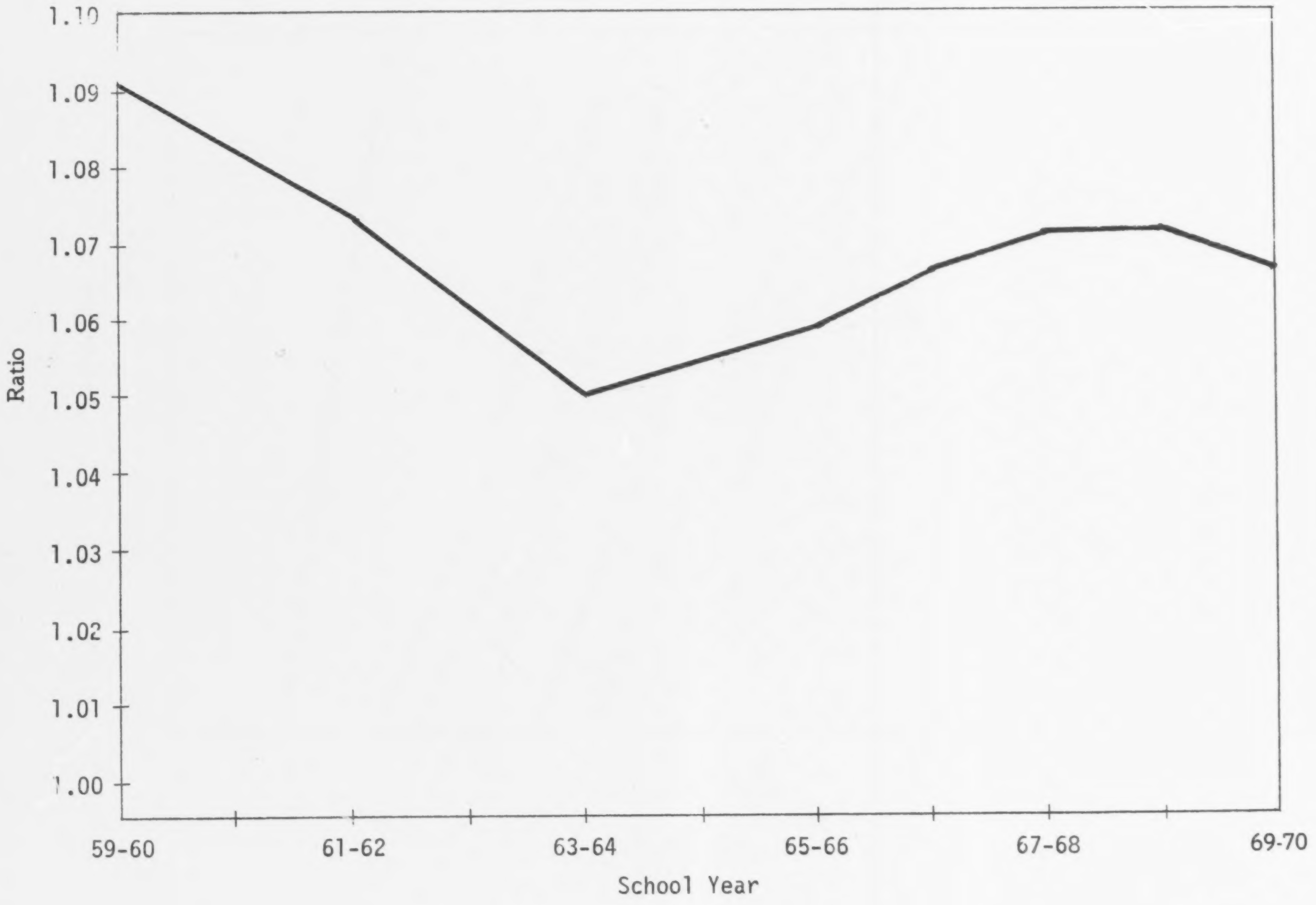


Table 1

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON FOR BACHELOR'S DEGREE

SDSG*	Var.**	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	1	4217	4225	4525	4633	4700	4823	5023	5237	5681	5974	6538
	2	6062	6087	6405	6607	6681	6850	7133	7313	7745	8025	8638
	3	10	10	10	10	10	10	10	9	9	9	8
	4	6	6	6	6	6	6	6	6	6	6	6
2	1	4131	4174	4487	4604	4676	4842	5000	5222	5639	6038	6567
	2	5792	5918	6294	6485	6575	6781	7017	7267	7916	8511	9131
	3	11	11	11	11	10	10	10	9	9	9	9
	4	9	9	9	9	9	9	9	9	9	9	9
3	1	4178	4218	4442	4606	4635	4810	4978	5175	5580	5991	6497
	2	5709	5805	6082	6262	6243	6464	6739	7006	7467	7858	8391
	3	10	11	10	10	10	9	9	9	9	8	7
	4	20	20	20	20	20	20	20	20	20	20	20
4	1	4145	4211	4431	4588	4646	4799	4980	5179	5571	5924	6389
	2	5522	5627	5930	6173	6253	6459	6742	7064	7527	7888	8438
	3	10	10	10	10	10	10	10	9	9	9	8
	4	30	30	30	29	30	30	31	30	30	30	30
5	1	4136	4215	4447	4616	4688	4819	5001	5183	5583	5940	6413
	2	5554	5646	5853	6054	6217	6394	6641	6891	7231	7711	8153
	3	11	11	10	10	10	10	10	10	9	8	8
	4	22	25	24	25	25	24	24	24	25	25	25
6	1	4225	4249	4459	4661	4719	4827	5041	5224	5592	5928	6392
	2	5367	5408	5731	5951	6012	6253	6462	6702	7041	7476	8053
	3	10	10	10	10	10	10	10	9	8	8	7
	4	26	26	26	25	26	25	24	27	28	28	28
7	1	4235	4299	4533	4703	4753	4915	5093	5302	5696	5992	6424
	2	5292	5404	5698	5892	6044	6157	6417	6592	7048	7399	7881
	3	9	10	10	10	10	9	9	8	8	8	7
	4	46	45	43	45	48	46	36	56	57	53	55
8	1	4256	4324	4543	4778	4819	4947	5123	5293	5688	5987	6419
	2	5217	5350	5636	5919	5982	6096	6325	6496	6983	7233	7659
	3	9	9	9	9	9	8	8	8	8	7	7
	4	29	34	26	36	42	36	35	48	44	53	56
9	1	4262	4262	4487	4897	4890	5031	5081	5297	5913	6006	6508
	2	5200	5211	5453	5868	5956	5956	6236	6608	6725	7030	7656
	3	8	8	8	8	7	7	8	11	5	7	7
	4	10	10	6	8	10	4	10	9	3	13	23

* School District Size Group

** Variable
1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

609

Table 2

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON FOR FIVE YEARS PREPARATION

SDSG*	Var.**	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	1	4509	4520	4880	5079	5154	5301	5574	5820	6267	6566	7234
	2	6733	6763	7178	7436	7539	7768	8152	8432	9083	9600	10516
	3								10	11	11	10
	4	6	6	6	6	6	6	6	6	6	6	6
2	1	4381	4425	4754	4907	4997	5165	5421	5683	6135	6576	7159
	2	6300	6463	6876	7143	7276	7547	7961	8407	9225	9938	10713
	3								11	11	11	11
	4	9	9	9	9	9	9	9	9	9	9	9
3	1	4377	4429	4673	4857	4877	5082	5305	5562	6054	6499	7091
	2	6171	6367	6711	6987	7041	7304	7679	8151	8776	9380	10194
	3								11	11	11	11
	4	20	20	20	20	20	20	20	20	20	20	20
4	1	4311	4379	4625	4811	4875	5045	5265	5595	5932	6339	6965
	2	5937	6075	6451	6730	6843	7088	7519	7925	8557	9105	9922
	3								12	11	11	11
	4	30	30	30	29	30	30	31	30	30	30	30
5	1	4309	4385	4624	4806	4893	5053	5291	5487	5963	6379	6978
	2	5975	6045	6346	6674	6823	7121	7440	7794	8448	8981	9683
	3								12	12	11	11
	4	22	25	24	25	25	25	24	24	25	25	25
6	1	4393	4405	4622	4829	4891	5022	5253	5493	5926	6311	6841
	2	5741	5789	6165	6452	6541	6801	7061	7507	8136	8675	9396
	3								12	12	11	11
	4	25	26	26	25	26	25	24	27	28	28	28
7	1	4384	4448	4702	4884	4921	5121	5312	5575	6023	6360	6849
	2	5585	5713	6156	6392	6480	6750	7075	7413	8002	8512	9186
	3								11	11	11	11
	4	46	44	44	45	46	46	36	56	57	53	55
8	1	4413	4492	4740	4974	5022	5158	5338	5533	5992	6342	6832
	2	5567	5720	6147	6516	6625	6785	6989	7294	7838	8286	8906
	3								11	11	11	11
	4	28	34	26	35	40	35	35	48	44	53	56
9	1	4453	4464	4672	5060	5084	5238	5297	5535	6158	6341	6914
	2	5438	5451	5820	6467	6530	6425	6687	7034	7700	7741	8745
	3								12	10	9	10
	4	9	9	5	7	6	4	8	9	3	13	22

* School District Size Group

** Variable 1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

Table 3

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON FOR MASTER'S DEGREE

SDSG*	Var.**	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	1	4776	4831	5348	5584	5681	5781	5974	6326	6766	7120	7779
	2	7199	7278	8003	8314	8443	8725	9261	9722	10406	10944	11997
	3	12	12	13	12	12	12	13	12	12	12	12
	4	6	6	6	6	6	6	2	2	2	2	2
2	1	4618	4678	5130	5352	5520	5735	5866	6157	6608	7197	7695
	2	6793	6972	7436	7846	8104	8488	8870	9550	10267	11191	12006
	3	13	13	13	12	12	13	12	12	11	12	11
	4	7	8	8	9	9	9	5	5	5	3	4
3	1	4535	4595	4906	5116	5145	5424	5701	6075	6621	7124	7735
	2	6487	6537	7046	7385	7452	7891	8417	9062	9894	10574	11460
	3	12	12	13	13	13	13	13	13	13	12	13
	4	17	15	17	19	19	19	15	14	12	12	9
4	1	4465	4544	4831	5058	5157	5360	5615	5892	6355	6694	7509
	2	6172	6373	6819	7146	7311	7612	8129	8631	9350	9903	10914
	3	13	13	13	13	13	13	13	13	13	13	12
	4	28	29	29	27	30	29	24	22	15	11	11
5	1	4434	4555	4807	5029	5137	5344	5587	5866	6376	6936	7622
	2	6332	6472	6837	7199	7401	7852	8220	8696	9435	10323	11244
	3	14	14	14	14	14	14	14	14	13	13	13
	4	16	16	17	22	23	22	20	18	17	17	14
6	1	4464	4479	4782	4992	5036	5221	5479	5794	6263	6729	7300
	2	6033	6060	6529	6872	6976	7317	7657	8202	8986	9627	10478
	3	14	14	14	14	15	14	14	14	14	13	13
	4	18	20	23	23	23	24	22	22	21	21	17
7	1	4511	4570	4826	5029	5067	5299	5550	5836	6349	6793	7284
	2	5839	5956	6464	6751	6831	7160	7629	8127	8713	9395	10297
	3	12	12	13	13	13	13	13	13	13	13	13
	4	32	32	35	37	39	40	30	43	44	40	35
8	1	4524	4672	4902	5135	5201	5368	5566	5750	6241	6612	7189
	2	5794	6096	6530	6812	7011	7271	7440	7727	8488	8967	9666
	3	11	12	13	13	13	13	13	12	13	13	12
	4	21	23	22	29	35	32	31	41	33	42	44
9	1	4585	4598	4888	5302	5246	5375	5387	5734	6465	6667	7232
	2	5742	5756	6323	6563	6651	6713	6924	7405	8425	8197	9233
	3	10	10	11	11	11	10	10	13	12	11	12
	4	8	8	4	5	8	4	8	9	4	11	15

* School District Size Group

** Variable 1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

Table 4

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON FOR SIX YEARS PREPARATION

SDSG*	Var.**	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	1	4793	4807	5240	5505	5590	5769	7000	6337	6876	7200	7885
	2	7383	7420	7995	8335	8452	8734	9237	9672	10578	11168	12199
	3								12	13	13	12
	4	6	6	6	6	6	6	6	6	6	6	6
2	1	4588	4707	5135	5315	5490	5621	6014	6213	6661	7126	7761
	2	6762	6972	7426	7806	8096	8344	9027	9568	10512	11413	12355
	3								12	12	12	12
	4	7	8	8	7	7	8	9	8	9	8	9
3	1	4593	4659	4915	5099	5126	5371	5694	5998	6559	7057	7740
	2	6555	6790	7220	7520	7622	7933	8475	9007	9847	10582	11531
	3								13	13	13	13
	4	20	20	20	20	19	19	20	20	18	18	19
4	1	4473	4547	4820	5050	5130	5341	5598	5900	6385	6840	7539
	2	6305	6455	6876	7182	7311	7619	8135	8672	9421	10148	11129
	3								12	13	13	12
	4	27	27	27	27	28	27	27	28	29	29	29
5	1	4493	4574	4821	5031	5123	5330	5612	5855	6406	6912	7598
	2	6380	6415	6798	7241	7446	7813	8253	8679	9415	10109	10928
	3								14	14	13	13
	4	18	21	20	21	21	22	22	23	25	25	25
6	1	4532	4564	4811	5044	5109	5259	5503	5835	6257	6728	7312
	2	6068	6133	6577	6901	7070	7351	7640	8274	8897	9544	10471
	3								14	13	13	13
	4	21	20	19	20	18	21	20	20	24	26	26
7	1	4528	4613	4825	5043	5065	5283	5500	5836	6344	6728	7361
	2	5905	6073	6532	6870	6924	7132	7529	8093	8692	9322	10179
	3								13	13	13	13
	4	28	31	26	30	30	32	27	47	50	46	51
8	1	4551	4674	4914	5149	5231	5408	5581	5772	6295	6674	7329
	2	6026	6173	6614	6886	7073	7292	7486	7841	8567	9106	9910
	3								13	12	12	12
	4	15	20	16	21	24	26	25	34	29	35	40
9	1	4581	4581	4775	5274	5156	5513	5262	5820		6466	7305
	2	5801	5801	7375	6680	7089	7138	7124	7585		8875	9238
	3								11		11	12
	4	4	4	1	3	3	2	4	2		2	12

* School District Size Group

** Variable 1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

Table 5

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON FOR HIGHEST LEVEL PREPARATION

SDSG*	Var.**	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	1	5102	5187	5743	6044	6161	6436	6845	7198	7732	9000	8651
	2	7850	7973	8607	9025	9176	9574	10161	10671	11658	12196	13209
	3								13	13	13	13
	4	5	6	6	6	6	6	6	6	6	6	6
2	1	5005	5105	5600	5951	6147	6669	6871	7399	7581	8172	8756
	2	7164	7511	7927	8403	8768	9308	10071	10796	11661	12519	13478
	3								11	13	12	13
	4	3	4	7	6	6	6	8	8	8	8	8
3	1	5032	5120	5524	5728	5804	6026	6299	6778	7077	8040	8509
	2	7217	7441	7873	8419	8568	8864	9321	9997	10903	11631	12376
	3								13	13	13	13
	4	7	10	12	13	13	15	13	15	16	17	19
4	1	4664	4738	5227	5519	5682	5882	6012	6447	7262	7766	8373
	2	6564	6689	7314	7791	7944	8313	8756	9422	10428	11133	12025
	3								13	13	13	12
	4	7	10	11	12	11	15	20	21	19	21	27
5	1	4579	4766	5036	5297	5470	5593	5925	6197	6785	7345	8288
	2	6598	6791	7253	7672	8048	8265	8769	9138	9989	10867	11871
	3								15	14	14	13
	4	5	7	9	10	9	12	8	14	17	18	21
6	1	4677	4621	5142	5324	5324	5490	5520	6039	6774	7121	7819
	2	6520	6380	7550	7682	7682	7802	7545	8661	9523	10096	11043
	3								14	13	14	13
	4	2	3	4	4	4	5	2	6	7	10	17
7	1	4574	4593	5307	5468	5319	5531	5793	6193	6748	7184	7835
	2	5642	5525	7310	7372	7166	7477	7828	8319	9093	9860	10557
	3								13	13	13	12
	4	7	4	8	8	9	9	5	14	16	17	29
8	1	4658	5100	5408	5438	5508	5947	6432	6310	6623	7054	7700
	2	6125	7410	7140	7132	7159	7854	8422	8588	9010	9548	10384
	3								13	13	13	13
	4	3	1	3	5	5	4	4	10	12	15	24
9	1	4439	4493	4860	5238	5473		5621	6230		6818	6843
	2	5435	5495	5400	5820	6320		7025	7910		7770	10850
	3								12		7	13
	4	2	2	1	1	2		2	1		1	7

* School District Size Group

** Variable 1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

Table 6

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON BY SCHOOL DISTRICT SIZE GROUP

SDSG*	VAR.**	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	1	4665	4799	5114	5369	5457	5621	5892	6185	6648	6972	7592
	2	7018	7216	7588	7943	5058	8330	8716	9076	9815	10301	11206
	3	11	11	11	11	11	11	10	11	11	11	11
	4	29	35	25	30	30	30	26	26	26	26	26
2	1	4459	4550	4988	5167	5301	5528	5805	6098	6490	6959	7544
	2	6435	6658	7144	7458	7672	7999	8524	9019	9837	10570	11427
	3	12	12	12	11	11	11	11	11	11	11	11
	4	35	38	41	40	40	41	40	39	40	37	39
3	1	4468	4544	4835	5031	5064	5304	5533	5859	6328	6885	7472
	2	6304	6491	6905	7229	7291	7623	8014	8540	9247	9883	10679
	3	11	11	11	11	11	11	11	12	11	11	11
	4	84	85	89	92	91	93	88	89	87	87	87
4	1	4360	4441	4720	4933	5012	5215	5443	5751	6208	6636	7307
	2	6006	6167	6577	6891	7010	7310	7759	8246	8895	9478	10380
	3	12	12	12	11	11	11	11	12	12	11	11
	4	122	126	127	124	129	131	134	131	123	121	127
5	1	4343	4439	4693	4900	4995	5178	5402	5657	6170	6645	7323
	2	6057	6150	6492	6848	7039	7384	7694	8121	8785	9464	10235
	3	12	12	12	12	12	12	12	13	12	12	11
	4	83	94	94	103	103	105	97	104	109	110	110
6	1	4397	4419	4674	4889	4938	5094	5312	5586	6033	6461	7049
	2	5784	5833	6272	6566	6648	6954	7183	7662	8277	8880	9713
	3	11	12	12	12	12	12	12	12	12	11	11
	4	92	95	98	97	97	100	92	102	108	113	116
7	1	4400	4466	4734	4923	4950	5157	5361	5652	6126	6498	7056
	2	5610	5740	6220	6471	6551	6795	7142	7549	8131	8687	9442
	3	10	11	11	11	11	11	11	11	11	11	11
	4	159	156	158	167	180	175	137	219	227	209	225
8	1	4419	4514	4773	5003	5055	5224	5413	5606	6061	6417	6984
	2	5600	5780	6207	6500	6624	6846	7058	7355	7955	8389	9084
	3	10	10	11	11	11	10	10	11	11	11	10
	4	96	113	93	130	156	137	131	181	162	198	220
9	1	4442	4451	4674	5082	5083	5257	5268	5561	6152	6340	6908
	2	5483	5498	5875	6287	6425	6475	6681	7083	7697	7693	8782
	3	9	9	9	9	9	8	9	12	9	9	10
	4	33	33	17	26	32	14	32	28	10	40	80

* School District Size Group

** Variable 1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

Table 7

1959-1970 ANALYSIS OF TEACHER SALARY SCHEDULES IN WASHINGTON BY LEVEL OF PREPARATION

VAR*	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
Bachelor's Degree											
1	4204	4257	4484	4677	4733	4867	5044	5246	5643	5971	6435
2	5438	5530	5833	6047	6132	6307	6559	6760	7207	7542	8027
3	9	10	10	10	10	9	9	9	8	8	7
4	198	205	190	203	215	200	195	229	222	237	252
Five Years											
1	4376	4432	4678	4884	4938	5102	5311	5558	6001	6374	6916
2	5822	5934	6344	6632	6729	6975	7297	7621	8256	8718	9413
3								11	11	11	11
4	198	204	189	201	208	200	192	229	222	237	251
Master's Degree											
1	4513	4586	4873	5098	5166	5367	5579	5950	6355	6773	7345
2	6132	6267	6749	7064	7188	7533	7847	8261	9003	9506	10298
3	12	13	13	13	13	13	13	13	13	13	13
4	153	157	161	177	192	185	157	176	153	159	151
Six Years											
1	4540	4615	4878	5100	5164	5364	5614	5888	6392	6817	7462
2	6261	6386	6863	7160	7303	7570	7994	8429	9160	9791	10590
3								13	13	13	12
4	146	157	143	155	156	163	160	188	190	195	216
Highest Level											
1	4769	4891	5359	5586	5672	5908	6214	6510	7015	7539	8072
2	6634	6944	7587	7929	8039	8442	8970	9351	10158	10796	11489
3								13	13	13	13
4	41	47	61	65	65	72	68	95	101	113	158

* Variable
1. Average Minimum
2. Average Maximum
3. Average Number of Increments
4. Number of School Districts

Table 8

MEAN AMOUNT OF INCREMENTS IN SALARY SCHEDULES BY TEACHER PREPARATION LEVEL

Bachelor's Degree

SDSG*	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	$ 185	$ 186	$ 188	$ 204	$ 205	$ 210	$ 215	$ 222	$ 233	$ 241	$ 268
2	154	162	168	178	184	194	206	222	244	268	278
3	147	151	163	166	169	179	189	202	221	230	254
4	133	138	150	157	160	166	180	200	213	229	252
5	132	133	138	147	152	159	168	178	190	208	230
6	115	115	124	127	127	141	145	165	179	198	223
7	111	115	123	124	130	131	144	154	167	175	198
8	109	113	119	129	134	142	143	147	164	175	185
9	119	120	118	129	155	139	150	122	152	143	176
	$ 126	$ 129	$ 137	$ 142	$ 145	$ 153	$ 162	$ 171	$ 187	$ 198	$ 217

Master's Degree

SDSG	59-60	60-61	61-62	62-63	63-64	64-65	65-66	66-67	67-68	68-69	69-70
1	$ 197	$ 198	$ 210	$ 221	$ 224	$ 239	$ 295	$ 295	$ 293	$ 333	$ 367
2	167	175	183	201	208	219	260	290	321	342	392
3	157	157	170	178	182	194	212	234	257	278	294
4	133	141	154	162	167	176	198	218	233	249	280
5	138	140	149	157	163	180	192	202	227	253	283
6	116	114	128	132	134	145	157	170	201	218	240
7	114	116	130	135	138	143	157	173	181	196	229
8	111	117	128	134	142	149	149	161	179	187	201
9	119	119	128	119	132	138	159	129	160	145	170
	$ 131	$ 133	$ 145	$ 152	$ 155	$ 165	$ 176	$ 186	$ 205	$ 214	$ 235

	Five Years				Six Years				Highest Level			
SDSG	66-67	67-68	68-69	69-70	66-67	67-68	68-69	69-70	66-67	67-68	68-69	69-70
1	$ 253	$ 268	$ 289	$ 317	$ 270	$ 296	$ 317	$ 359	$ 267	$ 302	$ 323	$ 360
2	245	273	300	317	282	312	350	373	302	326	351	360
3	226	246	264	287	233	259	282	303	241	303	283	302
4	201	229	246	271	222	242	263	291	226	246	265	293
5	190	210	229	248	200	221	241	261	203	225	251	270
6	166	192	211	234	181	199	219	244	190	207	214	247
7	164	176	188	211	173	182	198	222	169	175	199	218
8	156	172	182	197	164	194	200	215	175	187	193	238
9	125	159	256	187	160		219	159	140		136	312
	$ 179	$ 201	$ 213	$ 232	$ 196	$ 217	$ 234	$ 251	$ 216	$ 239	$ 249	$ 268

* School District Size Group

Table 9

1969-70 MEAN AND MEDIAN SCHEDULED SALARIES FOR CLASSROOM TEACHERS, BY GEOGRAPHIC REGION REPORTING SYSTEMS WITH ENROLLMENT OF 6000 OR MORE

Preparation Level		Washington	Far West*	United States
Bachelor's Degree Minimum				
Mean		$ 6521	$ 6720	$ 6383
Median		6525	6800	6450
Range	Low	6200	5650	4400
	High	6885	8400	8400
Master's Degree Maximum				
Mean		11847	11781	10717
Median		11712	11811	10890
Range	Low	9832	9379	5934
	High	12600	15540	15625
Maximum Scheduled Salary for Highest Preparation Level				
Mean		12936	13541	11855
Median		12970	13600	12014
Range	Low	11700	10920	5934
	High	15164	17220	18420

*Far West: Alaska, California, Hawaii, Nevada, Oregon, Washington

Table 10

1969-70 RANGES OF MAXIMUM SCHEDULED SALARIES FOR CENTRAL OFFICE ADMINISTRATORS AND SUPERVISING PRINCIPALS BY GEOGRAPHIC REGION REPORTING SYSTEMS WITH ENROLLMENTS OF 6,000 OR MORE

Position	Washington	Far West*	United States
Superintendents			
Range - Low	$ 23500	$19000	$13000
High	32825	51450	51450
Assistant Superintendents			
Range - Low	20019	17400	8793
High	26488	32181	33445
Directors, Consultants or Supervisors			
Range - Low	13870	12412	7990
High	22912	32181	33446
Senior High School Principal			
Range - Low	17585	14359	8499
High	22870	25252	28995
Junior High School Principal			
Range - Low	15671	13670	8388
High	20961	23745	26690
Elementary School Principal			
Range - Low	15620	12728	7619
High	21845	21845	26579
Classroom Teacher			
Range - Low	11963	10920	6990
High	15164	17220	18420

* Far West: Alaska, California, Hawaii, Nevada, Oregon, Washington.

Table 11

1967-1970 SALARIES OF CERTIFICATED EMPLOYEES BY SCHOOL DISTRICT SIZE GROUPS

Superintendents (a)

School District Size Group	1966-67 No.*	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
1	6	$ 25499	6	$ 27577	6	$ 28939	6	$ 31144
2	9	21193	9	23198	9	24974	9	27227
3	20	17814	20	19985	20	22010	20	23584
4	29	16071	30	17537	30	19190	30	21404
5	25	15099	25	16669	25	18180	25	20094
6	28	13482	28	14470	28	15705	28	17428
7	59	11950	60	13180	59	14147	57	15521
8	55	10599	55	11557	57	12485	39	13980
9	24	9578	26	10799	26	11289	13	13045

Assistant Superintendents (b)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.
1	6	$ 17865	6	$ 19347	6	$ 20402
2	9	16222	8	17674	9	18645
3	20	14148	19	15767	20	16876
4	26	12710	24	14334	27	15315
5	13	12263	13	13886	17	14763
6	5	10090	5	11465	7	11426
7			1	10360	1	11210
8			1	6988	9	9650
9			1	6300		

Directors, Supervisors, Consultants (c)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.
1	6	$ 12400	6	$ 12975	6	$ 12988
2	9	11945	9	13305	9	13775
3	20	10516	20	12180	20	12527
4	25	9883	28	11358	28	11273
5	17	9068	21	10391	21	10891
6	6	8985	13	10117	13	10154
7	10	7764	15	9819	15	9303
8	1	6200	4	8811	4	8147
9				6868		

*Number of school districts for which information is available

Table 11 – Continued

Elementary Principals (d)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.
1	6	$ 12442	6	$ 13688	6	$ 14534
2	9	12335	9	13785	9	14900
3	20	11236	20	12602	20	13619
4	29	10365	30	11508	30	12625
5	25	10220	25	11270	25	12517
6	28	9605	27	10544	28	11449
7	57	9093	59	9931	59	10840
8	45	8343	46	9648	54	10788
9	12	7824	14	8160	25	9109

Junior High Principals (e)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.
1	6	$ 13392	6	$ 14712	6	$ 15813
2	9	13671	9	14903	9	16223
3	20	12342	20	13583	20	14753
4	26	11522	27	12809	29	13796
5	15	10784	19	11837	19	13153
6	13	9451	14	10575	15	11649
7	4	8746	11	9773	18	10814
8	1	7252	6	10348	18	11094
9			1	8500	1	9351

Senior High Principals (f)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.
1	6	$ 14388	6	$ 15680	6	$ 16676
2	9	15162	9	16335	9	17735
3	20	13591	20	15195	20	16189
4	28	12378	29	13653	30	14963
5	25	11678	25	12871	24	14054
6	28	10513	27	11466	28	12298
7	57	9399	55	10454	56	11401
8	37	8642	36	9627	43	10617
9	8	7509	8	9058	14	9685

Table 11 – Continued

Elementary Teachers (g)

School District Size Group	1966-67		1967-68		1968-69	
	No.	Avg.	No.	Avg.	No.	Avg.
1	6	$ 7275	5	$ 7844	6	$ 8390
2	9	6984	9	7619	9	8264
3	20	6969	20	7585	20	8180
4	30	6660	30	7348	30	7876
5	25	6752	25	7303	25	7916
6	28	6512	28	7065	28	7579
7	60	6452	61	7023	60	7465
8	63	6301	65	6814	67	7371
9	73	6175	76	6626	75	7086

Junior High Teachers (h)

School District Size Group	1966-67		1967-68		1968-69	
	No.	Avg.	No.	Avg.	No.	Avg.
1	6	$ 7653	6	$ 8322	6	$ 8813
2	9	7413	9	8153	9	8666
3	20	7213	20	7937	20	8527
4	28	7066	30	7582	29	8228
5	19	6807	23	7434	19	8343
6	20	6579	25	7322	19	7565
7	36	6560	42	7128	33	7818
8	38	6421	40	7040	40	7292
9	18	6521	14	6851	19	6889

High School Teachers (i)

School District Size Group	1966-67		1967-68		1968-69	
	No.	Avg.	No.	Avg.	No.	Avg.
1	6	$ 8231	6	$ 9013	6	$ 9690
2	9	7857	9	8608	9	9495
3	20	7645	20	8024	20	9032
4	28	7451	29	8195	29	8848
5	25	7280	25	7991	25	8572
6	28	6875	28	7595	28	7987
7	58	6740	58	7350	57	7890
8	50	6490	49	7060	55	7533
9	24	6108	25	6724	25	7237

Table 11 – Continued

Classroom Teachers Average Total (j)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
1	6	$7589	6	$8259	6	$8802	6	$9794
2	9	7290	9	7985	9	8663	9	9529
3	20	7200	19	7905	20	8485	20	9233
4	30	6920	30	7626	30	8176	30	8913
5	25	6924	25	7533	25	8131	25	8866
6	28	6678	28	7286	28	7746	28	8426
7	60	6579	60	7161	60	7631	60	8335
8	63	6390	65	6937	65	7467	65	8143
9	73	6193	77	6656	78	7094	78	7659

Certificated Personnel Average Total (k)

School District Size Group	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
1	6	$8735	6	$9346	6	$10415
2	9	8577	9	9289	9	10229
3	20	8371	20	8985	20	9763
4	30	8041	30	8653	30	9440
5	25	7952	25	8594	25	9383
6	28	7646	28	8143	28	8886
7	60	7533	60	8028	60	8767
8	65	7311	65	7850	65	8496
9	76	6832	78	7238	78	7797

Number of Certificated Personnel and Their Average Salaries by Position (l)

Position	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
Superintendent	262	$13435	252	$14648	246	$16171	243	$17641
Asst. Supt.	151	14525	122	15535	172	16831	141	18721
Dir., Supvr., Conslt.	692	11229	759	12394	1076	12586	1241	13692
H.S. Principal	271	11265	245	12701	248	13806	254	14961
J.H.S. Principal	191	12291	197	13253	212	14487	231	15548
Elem. Principal	916	11051	874	12256	869	13414	893	14624
H.S. Teacher	8034	7657	7975	8300	8601	9006	16248*	9720*
J.H.S. Teacher	6107	7378	6545	7898	6199	8568		
Elem. Teacher	15464	7000	15535	7516	16814	8114	16664	8912
Classroom Teachers**	29975	7260	32049	7821	33370	8454	34352	9338
Certificated Personnel***	35468	7670	37369	8281	38895	8955	40614	9872

*Secondary Teachers

**Total also includes teachers of handicapped

***Total also includes other certificated personnel such as vice-principals, special teachers, librarians, etc.

Table 12

RATIO OF AVERAGE SALARIES OF ADMINISTRATIVE AND SUPERVISORY PERSONNEL AND CLASSROOM TEACHERS TO AVERAGE SALARY OF ALL CLASSROOM TEACHERS

	Superintendents				Ass't. Supt.			Dir., Supvr., Conslt.		
SDSG*	66-67	67-68	68-69	69-70	66-67	67-68	68-69	66-67	67-68	68-69
1	3.36	3.34	3.29	3.18	2.35	2.34	2.08	1.63	1.57	1.48
2	2.91	2.91	2.88	2.86	2.23	2.21	1.96	1.64	1.67	1.59
3	2.47	2.53	2.59	2.55	1.97	1.99	1.83	1.46	1.54	1.48
4	2.32	2.30	2.35	2.40	1.84	1.88	1.72	1.43	1.49	1.38
5	2.18	2.21	2.24	2.27	1.77	1.84	1.67	1.31	1.38	1.34
6	2.02	1.99	2.03	2.07	1.51	1.57	1.36	1.36	1.39	1.31
7	1.82	1.84	1.85	1.86		1.45	1.34	1.18	1.37	1.22
8	1.66	1.67	1.67	1.72		1.01	1.34	0.97	1.27	1.09
9	1.55	1.62	1.59	1.70		0.95	1.19		1.03	
Average	1.85	1.87	1.91	1.89	2.00	1.99	1.99	1.55	1.58	1.49

	Senior High Principal			Junior High Principal			Elementary Principals		
SDSG *	66-67	67-68	68-69	66-67	67-68	68-69	66-67	67-68	68-69
1	1.90	1.90	1.89	1.76	1.78	1.80	1.64	1.66	1.65
2	2.08	2.05	2.05	1.88	1.87	1.87	1.69	1.73	1.72
3	1.89	1.92	1.91	1.71	1.72	1.74	1.56	1.59	1.61
4	1.79	1.79	1.83	1.67	1.68	1.69	1.50	1.51	1.54
5	1.69	1.71	1.73	1.56	1.57	1.62	1.48	1.50	1.54
6	1.57	1.57	1.59	1.42	1.45	1.50	1.44	1.45	1.48
7	1.43	1.46	1.49	1.33	1.36	1.42	1.38	1.39	1.42
8	1.35	1.39	1.42	1.13	1.49	1.49	1.30	1.39	1.44
9	1.21	1.36	1.37		1.28	1.32	1.26	1.23	1.28
Average	1.55	1.62	1.63	1.69	1.69	1.71	1.52	1.57	1.59

	Senior High Teachers			Junior High Teachers			Elementary Teachers		
SDSG*	66-67	67-68	68-69	66-67	67-68	68-69	66-67	67-68	68-69
1	1.08	1.09	1.10	1.00	1.00	1.00	.96	.95	.95
2	1.08	1.08	1.10	1.02	1.02	1.00	.96	.95	.95
3	1.06	1.02	1.06	1.00	1.00	1.00	.97	.96	.96
4	1.08	1.07	1.08	1.02	.99	1.00	.96	.96	.96
5	1.05	1.06	1.05	.98	.97	1.02	.98	.97	.97
6	1.03	1.04	1.03	1.00	1.00	.98	.98	.97	.98
7	1.02	1.03	1.03	1.00	1.00	1.02	.98	.98	.98
8	1.02	1.02	1.01	1.00	1.01	.98	.99	.98	.99
9	.99	1.01	1.02	1.05	1.03	.98	1.00	1.00	1.00
Average	1.05	1.06	1.07	1.02	1.01	1.01	.96	.96	.96

* School District Size Group

Table 13

1967-1970 ENROLLMENT AND EMPLOYEE DATA BY SCHOOL DISTRICT SIZE GROUP

FTE Enrollment (a)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
1	6	38416.17	6	39966.67	6	40115.33	6	39688.72
2	9	12147.78	9	13193.44	9	13914.89	9	14592.38
3	20	6513.30	20	6894.80	20	7105.10	20	7308.60
4	30	3171.17	30	3384.13	30	3532.57	30	3675.04
5	25	1998.44	25	2100.52	25	2169.00	25	2243.30
6	28	1205.11	28	1245.18	28	1271.46	28	1309.62
7	60	668.92	60	705.18	60	719.67	60	737.78
8	64	327.06	65	328.29	65	332.76	65	339.89
9	74	80.89	77	82.53	78	82.49	78	82.03

Number of Classroom Teachers (b)

School District Size Group	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
1	6	1686.98	6	1687.00	6	1707.66
2	9	547.98	9	599.23	9	617.26
3	20	285.94	20	297.59	20	312.93
4	30	138.16	30	146.28	30	152.17
5	25	84.40	25	92.88	25	94.86
6	28	53.19	28	54.63	28	56.54
7	60	31.35	60	32.99	60	33.83
8	65	15.91	65	16.62	65	16.98
9	77	5.05	78	5.12	78	5.34

Number of Certificated Personnel (c)

School District Size Group	1966-67 No.	1966-67 Avg.	1967-68 No.	1967-68 Avg.	1968-69 No.	1968-69 Avg.	1969-70 No.	1969-70 Avg.
1	6	1890.00	6	2005.78	6	2010.10	6	2073.23
2	9	594.22	9	643.31	9	702.90	9	738.05
3	20	314.15	20	330.56	20	342.19	20	364.10
4	30	148.47	30	158.24	30	167.43	30	176.15
5	25	97.36	25	101.26	25	107.44	25	111.68
6	28	59.39	28	61.12	28	62.60	28	65.67
7	60	34.92	60	36.29	60	38.02	60	39.28
8	64	18.36	65	18.25	65	19.08	65	19.53
9	74	5.41	77	5.62	78	5.63	78	5.86

Table 13 – Continued

Pupils Per Classroom Teacher (d)

School District Size Group	1967-68		1968-69		1969-70	
	No.	Avg.	No.	Avg.	No.	Avg.
1	6	23.69	6	23.78	6	23.24
2	9	24.08	9	23.22	9	23.64
3	20	24.11	20	23.88	20	23.36
4	30	24.49	30	24.09	30	24.15
5	25	24.89	25	23.35	25	23.65
6	28	23.41	28	23.27	28	23.16
7	60	22.49	60	21.81	60	21.81
8	65	20.63	65	20.02	65	20.02
9	77	16.34	78	16.11	78	15.36
	320	23.70	321	23.40	321	23.20

Pupils Per Certificated Personnel (e)

School District Size Group	1966-67		1967-68		1968-69		1969-70	
	No.	Avg.	No.	Avg.	No.	Avg.	No.	Avg.
1	6	20.32	6	19.93	6	19.96	6	19.14
2	9	20.44	9	20.51	9	19.80	9	19.77
3	20	20.73	20	20.86	20	20.76	20	20.07
4	30	21.36	30	21.39	30	21.10	30	20.86
5	25	20.53	25	20.74	25	20.19	25	20.09
6	28	20.29	28	20.37	28	20.31	28	19.94
7	60	19.16	60	19.43	60	18.93	60	18.78
8	64	17.81	65	17.99	65	17.44	65	17.40
9	74	14.95	77	14.69	78	14.65	78	14.00
	316	20.30	320	20.30	321	20.00	321	19.60

Certificated Personnel Turnover - Percent (f)

School District Size Group	1966-67		1967-68		1968-69		1969-70	
	No.	Avg.	No.	Avg.	No.	Avg.	No.	Avg.
1	6	12.72	6	12.25	6	15.81	6	15.01
2	9	14.67	9	12.47	9	16.07	9	14.44
3	20	15.55	20	18.71	20	16.76	20	14.90
4	30	14.33	30	15.03	30	17.15	30	15.31
5	25	15.76	25	17.65	25	17.40	25	15.35
6	27	19.48	28	18.94	28	23.89	28	17.68
7	58	22.51	60	20.29	59	23.32	59	22.26
8	60	26.05	53	25.72	64	27.12	65	27.85
9	53	42.93	54	40.43	58	42.88	58	42.40
	288	15.60	285	14.53	299	17.60	300	16.30

Table 14

DIFFERENCE BETWEEN AVERAGE CERTIFICATED PERSONNEL SALARY COST PER PUPIL AND AVERAGE CLASSROOM TEACHER SALARY COST PER PUPIL

Average Classroom Teacher Salary Cost Per Pupil (a)

School District Size Group	1967-68	1968-69	1969-70
1	$ 349	$ 370	$ 421
2	332	373	403
3	328	355	395
4	311	339	369
5	303	348	375
6	311	333	364
7	318	350	382
8	336	373	407
9	407	440	499
Average	$ 330	$ 361	$ 403

Average Certificated Personnel Salary Cost Per Pupil (b)

School District Size Group	1967-68	1968-69	1969-70
1	$ 438	$ 468	$ 544
2	418	469	517
3	401	433	486
4	376	410	453
5	383	426	467
6	375	401	446
7	388	424	467
8	406	450	488
9	465	494	557
Average	$ 408	$ 448	$ 504

Difference (c)

School District Size Group	1967-68	1968-69	1969-70
1	$ 89	$ 98	$ 123
2	86	96	114
3	73	78	91
4	65	71	84
5	80	78	92
6	64	68	82
7	70	74	85
8	70	77	81
9	58	54	58
Average	$ 78	$ 87	$ 101

Table 15

AVERAGE SALARIES OF CLASSROOM TEACHERS COMPARED WITH DRAFTSMEN, NURSES, AND SECRETARIES IN SEATTLE-EVERETT 1964-1965 THROUGH 1969-1970

	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Classroom Teachers	$ 7,152	$ 7,578	$ 8,045	$ 8,622	$ 9,178	$10,173
*Draftsmen, Class A	7,800	7,956	8,190	8,528	9,178	9,620
*Nurses	5,980	6,006	6,604	7,358	7,748	8,164
*Secretaries	5,538	5,824	6,084	6,266	6,760	7,124

*Occupation Wage Survey - U.S. Department of Labor

Table 16

COMPARISON OF SEATTLE-EVERETT AREA BUDGET COSTS AND TEACHER SALARIES

Estimates of Seattle-Everett Area
Budget Costs for a Family of Four*

Year	Lower	Intermediate	Higher
Spring 1967	$ 6,520	$ 9,550	$ 13,486
Spring 1969	7,197	10,485	14,861

Average Seattle-Everett Area
Classroom Teacher Salaries

Year	Everett	Seattle	Seattle-Everett
1966-67	$ 7,700	$ 8,094	$ 8,045
1967-68	8,799	8,597	8,622
1968-69	9,415	9,144	9,178
1969-70	10,580	10,115	10,173

*Three Standards of Living for an Urban Family of Four Persons - U.S. Department of Labor.

Table 17

AVERAGE STARTING SALARIES OF CLASSROOM TEACHERS COMPARED WITH THOSE IN PRIVATE INDUSTRY, 1964-65 THROUGH 1969-70

	Average Starting Salaries					
	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
Beginning teachers with bachelor's degree*						
Washington	$4,817	$5,000	$5,204	$5,616	$5,987	$6,521
United States	4,707	4,925	5,142	5,519	5,941	6,383
Male college graduates with bachelor's degree (U.S.)						
Engineering	7,356	7,584	8,112	8,772	9,312	9,816
Business Administration	5,880	6,240	6,576	7,140	7,560	8,016
Liberal Arts	5,712	6,216	6,432	6,780	7,368	7,884
Women college graduates with bachelor's degree (U.S.)						
Engineering-Technical Research	7,224	7,260	8,208	8,904	9,672	
General Business	4,848	5,520	6,000	6,840	7,104	
Secretary	4,560	4,620	5,088	5,460	5,820	
	Ratio of Private Industry Salaries to Classroom Teachers' Salaries					
Beginning teachers with bachelor's degree						
Washington	1.02	1.02	1.01	1.02	1.01	1.02
United States	1.00	1.00	1.00	1.00	1.00	
Male college graduates with bachelor's degree (U.S.)						
Engineering	1.56	1.54	1.58	1.59	1.57	
Business Administration	1.25	1.27	1.28	1.29	1.27	
Liberal Arts	1.21	1.26	1.25	1.23	1.24	
Women college graduates with bachelor's degree(U.S.)						
Engineering-Technical Research	1.54	1.47	1.60	1.61	1.63	
General Business	1.03	1.12	1.17	1.24	1.20	
Secretary	.97	.94	.99	.99	.98	

*Estimated by NEA Research Division for school systems enrolling 6,000 or more pupils.

Table 18

WASHINGTON STATE SCHOOL DISTRICTS ENROLLING 6,000 OR MORE PUPILS, 1968-69

School District	County	Number		Size Group
		Co.	S.D.	
Auburn	King	17	408	3
Bellevue	King	17	405	1
Bellingham	Whatcom	37	501	3
Bremerton	Kitsap	18	100	3
Central Valley	Spokane	32	356	3
Clover Park	Pierce	27	400	2
Edmonds	Snohomish	31	015	1
Everett	Snohomish	31	002	2
Federal Way	King	17	210	2
Franklin Pierce	Pierce	27	402	3
Highland	King	17	401	1
Issaquah	King	17	411	3
Kent	King	17	415	2
Kennewich	Benton	03	017	3
Lake Washington	King	17	414	2
Longview	Cowlitz	08	122	3
Northshore	King	17	417	3
Olympia	Thurston	34	111	3
Puyallup	Pierce	27	003	3
Renton	King	17	403	2
Richland	Benton	03	400	3
Seattle	King	17	001	1
Shoreline	King	17	412	2
Spokane	Spokane	32	081	1
Tacoma	Pierce	27	010	1
Vancouver	Clark	06	037	2
Walla Walla	Walla Walla	36	140	3
Yakima	Yakima	39	007	2

APPENDIX

1969-70 SCHEDULED TEACHER SALARIES
FOR WASHINGTON STATE GEOGRAPHIC REGIONS
BY SCHOOL DISTRICT SIZE GROUP

Table 1

WASHINGTON STATE GEOGRAPHIC REGIONS

Intermediate School Districts 101, 102, 103, and 104 (Eastern)

I.S.D. 101

Co.	Name
10	Ferry
22	Lincoln
26	Pend Oreille
32	Spokane
33	Stevens
38	Whitman

I.S.D. 102

Co.	Name
2	Asotin
7	Columbia
12	Garfield
36	Walla Walla

I.S.D. 103

Co.	Name
3	Benton
11	Franklin

I.S.D. 104

Co.	Name
1	Adams
13	Grant

Intermediate School Districts 105, 106, and 107 (Central)

I.S.D. 105

Co.	Name
19	Kittitas
20	Klickitat (W)
39	Yakima

I.S.D. 106

Co.	Name
4	Chelan
9	Douglas

I.S.D. 107

Co.	Name
24	Okanogan

Intermediate School Districts 108, 109, 110, and 111 (Northwest Central)

I.S.D. 108

Co.	Name
15	Island (N)
28	San Juan
29	Skagit
37	Whatcom

I.S.D. 109

Co.	Name
15	Island (S)
31	Snohomish

I.S.D. 110

Co.	Name
17	King

I.S.D. 111

Co.	Name
27	Pierce

Intermediate School Districts 112, 113, and 114 (Western)

I.S.D. 112

Co.	Name
6	Clark
8	Cowlitz
20	Klickitat (E)
25	Pacific (S)
30	Skamania
35	Wahkiakum

I.S.D. 113

Co.	Name
14	Grays Harbor
21	Lewis
23	Mason (S)
25	Pacific (N)
34	Thurston

I.S.D. 114

Co.	Name
5	Clallam
16	Jefferson
18	Kitsap
23	Mason (N)

Table 2

1969-70 MEDIANS OF SCHEDULED B.A. TEACHER SALARIES FOR WASHINGTON STATE GEOGRAPHIC REGIONS BY SCHOOL DISTRICT SIZE GROUP

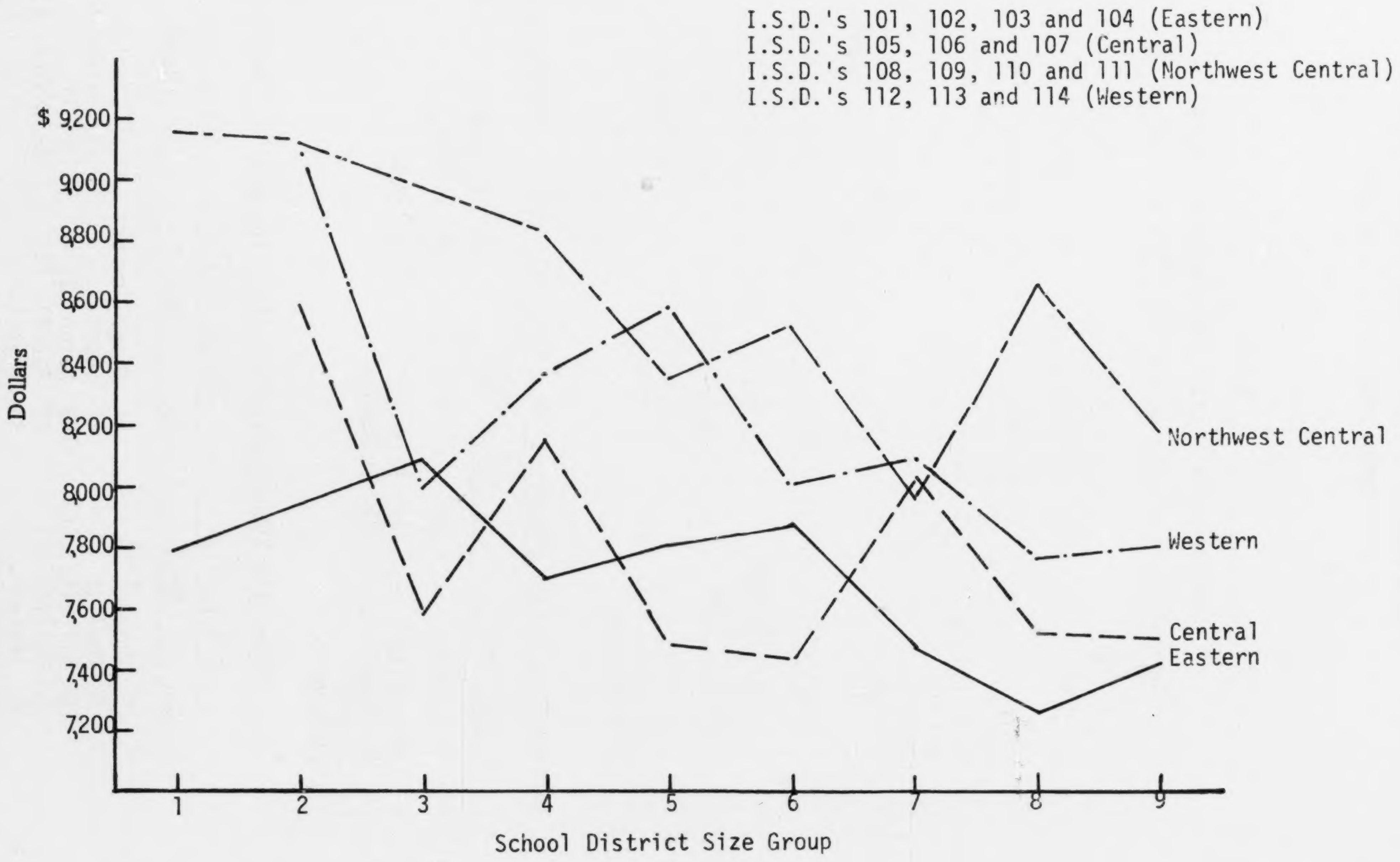


Table 3

1969-70 MEDIAN OF SCHEDULED SIX-YEAR TEACHER SALARIES FOR WASHINGTON STATE GEOGRAPHIC REGIONS BY SCHOOL DISTRICT SIZE GROUPS

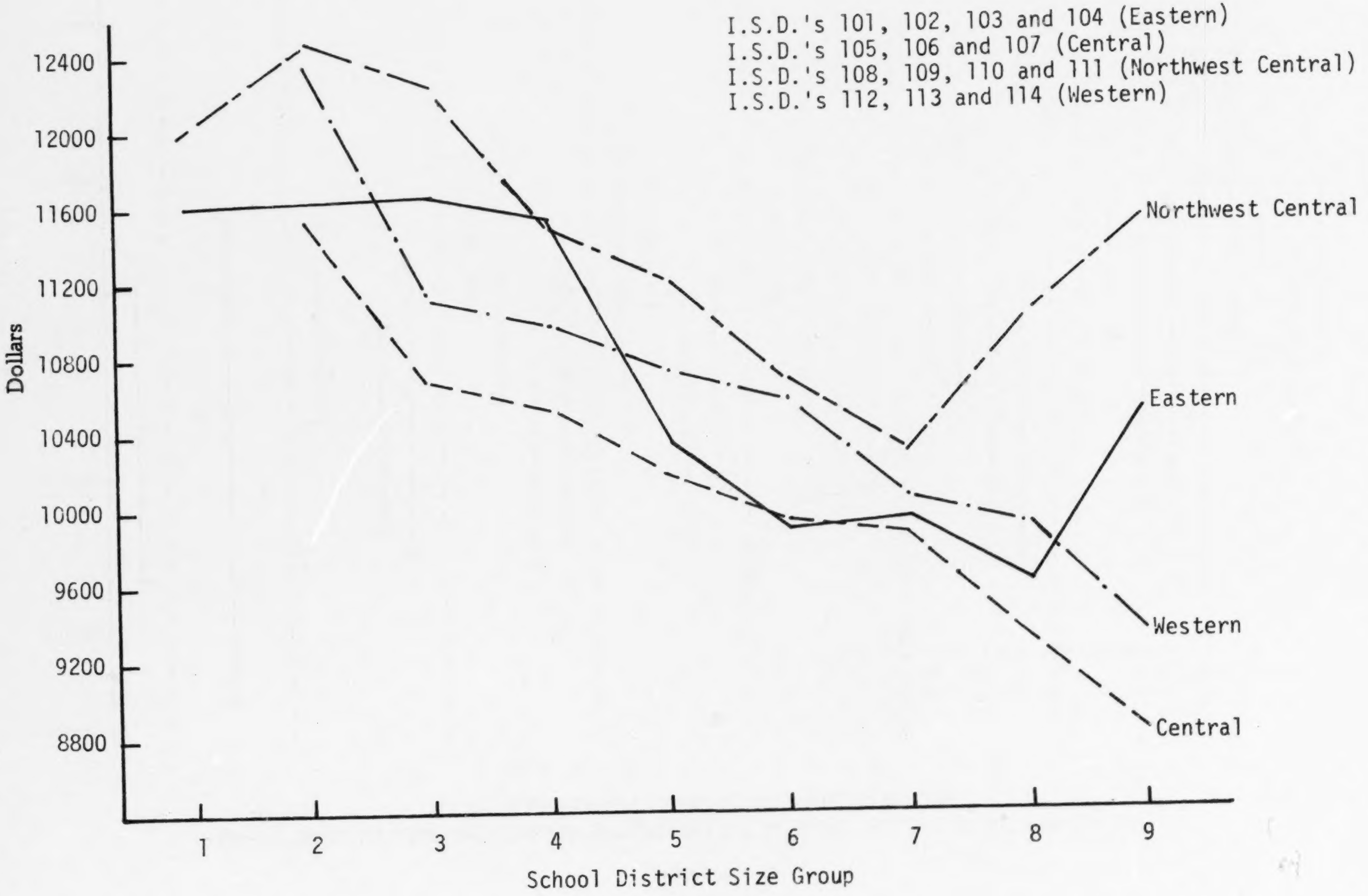


Table 4

1969-70 MEDIAN AND RANGES OF MAXIMUMS OF SCHEDULED B.A. TEACHER SALARIES BY INTERMEDIATE SCHOOL DISTRICT GROUPS

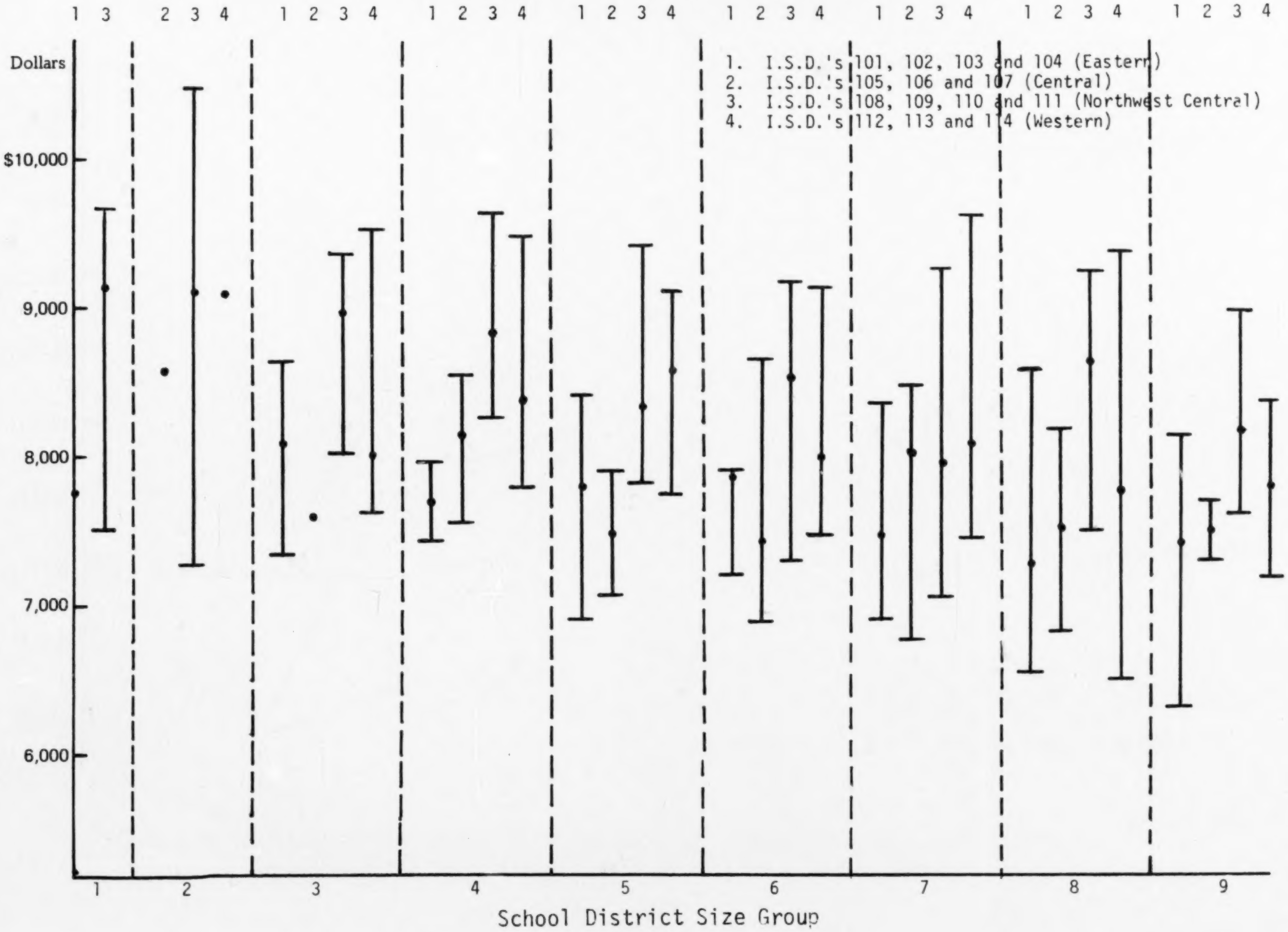


Table 5

1969-70 MEDIAN AND RANGES OF MAXIMUMS OF SCHEDULED SIX-YEAR TEACHER SALARIES BY INTERMEDIATE SCHOOL DISTRICT GROUPS

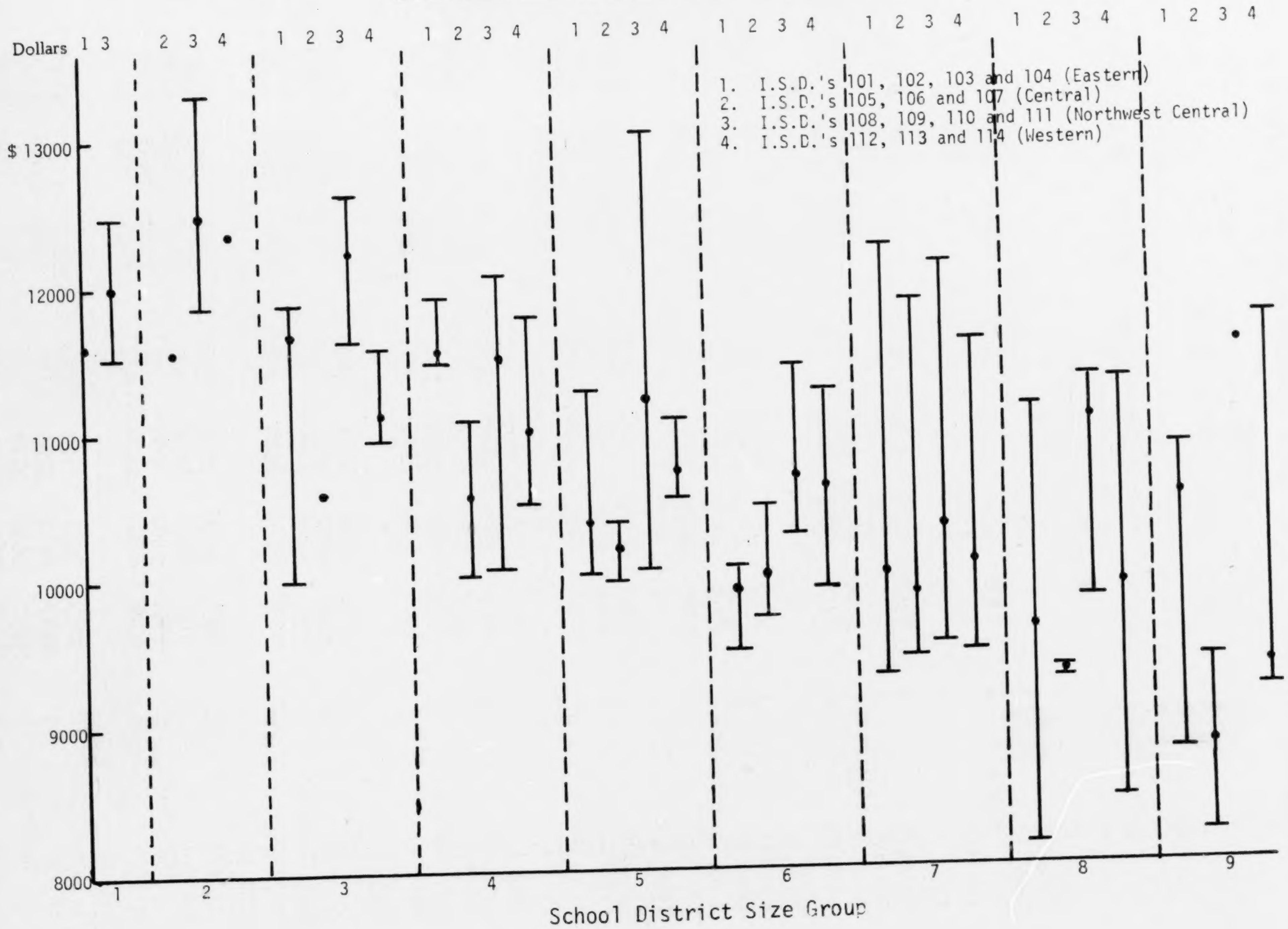


Table 6

1969-70 MEDIAN AND RANGES OF SCHEDULED B.A. TEACHER SALARIES FOR WASHINGTON STATE GEOGRAPHIC REGIONS BY SCHOOL DISTRICT SIZE GROUP

		Minimum				Maximum			
SDSG 1	No.	Min.	Med.	Max.	Range	Min.	Med.	Max.	Range
Eastern	1		$6206				$7789		
Central									
N.W. Central	5	$6400	6625	$6800	$400	$7500	9149	$9651	$2151
Western									
SDSG 2									
Eastern									
Central	1		6300				8586		
N.W. Central	7	6300	6650	6800	500	7276	9112	10472	3196
Western			6500				9100		
SDSG 3									
Eastern	6	6350	6500	6600	250	7342	8085	8636	1294
Central	1		6200				7595		
N.W. Central	7	6400	6600	6885	485	7998	8976	9364	1366
Western	6	6200	6460	6800	600	7595	7998	9520	1925
SDSG 4									
Eastern	4	6200	6277	6400	200	7424	7706	7958	534
Central	6	6150	6300	6500	350	7540	8145	8576	1036
N.W. Central	12	6212	6410	6600	388	8255	8823	9630	1375
Western	8	6400	6460	6637	237	7787	8376	9480	1693
SDSG 5									
Eastern	7	6000	6350	6500	500	6900	7800	8400	1500
Central	2	6250	6300	6350	100	7062	7484	7906	844
N.W. Central	13	6264	6450	6800	536	7812	8350	9412	1600
Western	3					7735	8580	9100	1365
SDSG 6									
Eastern	3	6000	6067	6500	500	7200	7865	7887	687
Central	5	6050	6310	6400	350	6890	7434	8646	1756
N.W. Central	8	6300	6350	6420	120	7296	8532	9180	1884
Western	12	6360	6500	6832	472	7482	8000	9146	1664
SDSG 7									
Eastern	14	5900	6325	6504	604	6900	7472	8350	1450
Central	14	6200	6365	6550	350	6773	8018	8470	1697
N.W. Central	10	6292	6500	6800	508	7055	7950	9250	2195
Western	18	6300	6500	7000	700	7447	8085	9620	2173
SDSG 8									
Eastern	25	5650	6400	7000	1350	6550	7275	8587	2037
Central	6	6100	6400	6530	430	6832	7523	8190	1358
N.W. Central	7	6300	6500	7000	700	7500	8645	9250	1750
Western	16	6000	6500	6650	650	6500	7757	9372	2872
SDSG 9									
Eastern	10	5850	6512	7100	1250	6318	7418	8131	1813
Central	2	6527	6613	6700	173	7310	7505	7700	390
N.W. Central	3	6600	6600	6772	172	7630	8184	8995	1365
Western	8	5750	6500	6900	1150	7200	7807	8379	1179

Table 7

1969-70 MEDIAN AND RANGES OF SCHEDULED SIX-YEAR TEACHER SALARIES FOR WASHINGTON STATE GEOGRAPHIC REGIONS BY SCHOOL DISTRICT SIZE GROUP

		Minimum				Maximum			
SDSG 1	No.	Min.	Med.	Max.	Range	Min.	Med.	Max.	Range
Eastern	1		$7758				$11605		
Central									
N.W. Central	2	$7680	7779	7878	$198	$11520	11997	$12474	$954
Western									
SDSG 2									
Eastern									
Central	1		6800				11553		
N.W. Central	7	7264	7847	8160	896	11855	12462	13328	1473
Western	1		8710				12350		
SDSG 3									
Eastern	6	7190	7544	8220	1030	9990	11650	11846	1856
Central	1		6944				10571		
N.W. Central	7	7296	7920	8350	1054	11610	12210	12600	990
Western	6	7341	7836	8160	819	10943	11100	11560	617
SDSG 4									
Eastern	3	6784	7226	7958	1174	11474	11523	11904	430
Central	6	6944	7305	8192	1248	10244	10525	11039	795
N.W. Central	11	7023	7562	8316	1293	10391	11482	12045	1654
Western	9	7150	7526	8448	1298	10496	10978	11765	1269
SDSG 5									
Eastern	7	6780	7600	8250	1470	10009	10350	11250	1241
Central	2	7187	7244	7302	115	9970	10172	10375	405
N.W. Central	13	6900	7611	8955	2055	10309	11196	13000	2691
Western	3	7150	7540	7800	650	10530	10725	11050	520
SDSG 6									
Eastern	2	7080	7326	7572	492	9480	9891	10302	822
Central	5	6783	7168	7434	651	9702	9922	10474	772
N.W. Central	8	7119	7293	7580	461	10269	10673	11420	1151
Western	11	7000	7482	7943	943	9885	10578	11204	1319
SDSG 7									
Eastern	13	6850	7350	8300	1450	9300	9950	12225	2925
Central	12	6789	7159	7800	1011	9222	9845	11841	2619
N.W. Central	10	6934	7626	9785	2851	9519	10309	12115	2596
Western	17	7000	7150	7840	840	9459	10048	11570	2111
SDSG 8									
Eastern	18	6328	7298	8520	2192	8150	9600	11130	2980
Central	2	6867	6911	6955	88	9293	9310	9327	34
N.W. Central	5	7168	7434	8000	832	9815	11025	11520	1705
Western	13	6800	7400	8000	1200	8450	9886	11300	2850
SDSG 9									
Eastern	6	6700	7389	7900	1200	8775	10497	10846	2071
Central	2	7200	7222	7245	45	8200	8799	9399	1199
N.W. Central	1		7513				11527		
Western	4	6468	7325	7709	1241	9200	9341	11731	2531